GOVERNMENT OF INDIA.

REPRINT NO. 21 OF RECORDS IN THE PUBLIC WORKS DEPARTMENT.

PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

PROVINCE OF OUDH

FOR

1869-70.

By Capt. E. S. WOOD,

CONSERVATOR OF FORESTS,

TOGETHER WITH A REVIEW BY THE CHIEF COMMISSIONER,

AND

ORDERS THEREON BY THE GOVERNMENT OF INDIA.

Calcutta:
PUBLIC WORKS DEPARTMENT PRESS.
1870.

CONTENTS.

REVIEW BY THE CHIEF COMMISSIONER.

CONSERVATOR'S REPORT.

FIRST PART—SPECIAL.

SECTION I.

		PAGE.
State forests, and Leased forests.	Area, boundaries and descriptive account ...	1

SECTION II.

Requirements of the surrounding population.	Prescriptive rights	2

SECTION III.

Protection of the forests	... ...	2

SECTION IV.

Management and improvement of the forests	... ...	3

SECTION V.

Yield and working of the forests	... ...	8

SECOND PART—GENERAL.

SECTION I.

Financial results of the year	... ...	8

SECTION II.

General remarks	... ...	9
Review by the Chief Commissioner	... .	11

APPENDICES.

I.—Map of Tehseels, Mohumdee and Allygunge, and Pergunnah Khyreegurh, District Mohumdee.

II.—List of waste-lands recommended for fuel and grazing reserves in the Kheree District.

III.—Report on grant No. 5 Allotment, as one of the contemplated fuel reserves in the vicinity of Bhira, Allygunge and Gola.

IV.—Statement of areas of villages bordering on, and situated within Toolseepoor Reserved Forest tracts, in Gonda and Baraich.

Abstract Report on cultivated, waste and jungle lands in Gonda and Baraich.

V.—Terms of sale of Forest produce in Oudh.

VI.—Abstract of Forest surveys, Kheree and Baraich Divisions.

VII.—Measurements to ascertain the age of trees.

VIII.—Sales of Forest produce during 1869-70.

IX.—Annual Summary of Revenue and Expenditure.

Annual Abstract Cash Account.

Annual Statement of Outstandings and Liabilities.

Annual Timber Account.

Statement of amount realized on account of Timber sold.

Annual Account of Forest Revenue.

X.—Proposed plan of Timber operations in 1870-71 and 1871-72.

Plan and estimate for a River and Canal boat.

Orders by the Government of India.

Public Works Department letter to the Chief Commissioner of Oudh, No. 458 F, dated 23rd August 1870.

Letter from Mr. D. Brandis, Inspector General of Forests, to the Secretary to the Chief Commissioner of Oudh, No. 65, dated 22nd October 1868.

FIRST PART.--SPECIAL.

I.—STATE FORESTS AND LEASED FORESTS.

1.—Area, Boundaries, Descriptive Accounts.

1. The area of the lands under the Forest Department, remain much the same as last year, the addition being two wooded grants one of 3,703 acres in Kheree and the other of 2,447 acres in Gondah, both of these have been made over for fuel reserves. For the last 3 years I have been endeavouring to get the extensive tracts covered with coppiced sal &c. in the vicinity of Bhira, Allygunj, and Gola made over to the Forest Department, and I am glad to say that I hope that at last there is a chance of the bulk of these forests being made over to the Forest Department. The grantees have had every indulgence given to them, they have failed to act up to the terms on which they took their grants, and it is only right that Government should not suffer any further loss. I herewith forward a map (Appendix I) showing the position of the grants and a list of them (Appendix II) with the remarks made against them by the Deputy Commissioner of Kheree. They contain altogether about 1,82,737 acres or 285 square miles—337 acres.

2. As I was ordered to report on each grant as it has resumed, I drew up a report which I have forwarded for the Deputy Commissioners remarks making it a joint report, a copy of such report is annexed (Appendix III) as it applies to all the grants which in Appendix II I have described as sál.

3. A part of the Rajgurh Singha tract covered with sál and mowah &c. still belongs to Government, but it is hardly worth while keeping whilst the bulk is made over to people to cultivate. As district officers are recommending the formation of village fuel plantations I think it would be wise in Government to purchase or obtain back by exchange the whole of this tract and reserve it for fuel, for why offer a premium on cutting down timber on ground suitable for it and then go to the expense of planting young trees in ground that may not be suitable?

4. In the Baraich Division a small portion of waste has been given up. I consider Mr. Kavanagh's boundaries were legally correct, but did not consider it worth while to oppose the district Officers by whose aid the lands were alienated, indeed I offered much more advantageous terms which were rejected by the Bhinga Talukdár in whose estate the boundary questions were raised, some waste land has been taken from the 8 Section, but as this will go to make up the waste land which has been half promised to the Mahárája of Bulrampoor I have not opposed it being given up, though I still consider the boundary laid down by Mr. J. Kavanagh and myself a proper one.

5. In the Gondah Division no change has been made and I trust that no change will be considered necessary. I forward (Appendix IV) a statement of the lands in the villages adjoining the forests in the Gondah Division, and regret that having to write this report so soon after the close of the past year that I cannot give more particulars. I think it will be found that the Mahárája has obtained large quantities of waste land which if not quite equal in area to the cultivation in the villages marching with the forests are of greater value than the poor forest land (as the Koani sál forests are included) which would have to be given up if land were given to each village.

6. The ditch alluded to in my last report was along the Nepal boundary and was meant more for a boundary line than for the exclusion of cattle, no ditch has been dug this year. I tried to make arrangements in the Kheree Division at Rs. 1-4 per 1,000 cubic feet, but could not come to terms till too late in the season. I believe the work can easily be done for Rs. 1-8 by Loonias, and I have desired Mr. Ponsonby to have the 8th Section of the Baraich Division ditched during the coming rains, the work will be done cheaper and neater and will stand better than if done in dry weather.

Section II.—Requirements of the Surrounding population-prescriptive rights.

7. Conservancy is being introduced very gradually indeed.

8. The minor forest produce was leased as last year. The terms of sale approved of by the Chief Commissioner will be found in Appendix V, they differ very slightly from those in force the year before.

9. The contractors are generally the talukdárs in the neighbourhood so that though the terms of sale may not be fully acted up to by the contractors, the forest and district officers have few, if any complaints made to them.

10 The commission for the investigation of the prescriptive rights of villagers was not appointed this year, and cannot well be till all the boundaries are finally decided, but I am glad to say that when the Financial Commissioner recommended that grazing and fuel rights should be given to the villages in the vicinity of the future Bhira fuel reserves (Appendix II) the Chief Commissioner considered it inexpedient to create any new rights, as those rights do not exist at present.

Section III.—Protection of the Forests.

11. Owing to the continuance of grazing all over the forests, little real protection has been afforded to future growths, but I have recommended that it should be commenced in the Kheree Division after the clearing of the blocks in which felling has taken place. The proposed plan of operation is given in Appendix X. When these blocks are cleared of timber and fuel, forest watchers can be put on the roads surrounding the blocks from about February to the commencement of the rains. Protection in the forests, in the Baraich and Gondah Divi-

sions, is even more necessary than in the Kheree Division, but will take place better after regular felling operations have been established, and they are not ready for this yet, as blocks have not yet been formed in the different sections.

12. The forest establishment is commencing to work pretty fairly, but at present we have few really good men as Rangers, but I hope they will be found in time.

13. Captain Losack has been invested with magisterial powers and I have recommended Mr. Ponsonby should also be invested. In Kheree out of 10 cases sent up, 9 have brought convictions. In Baraich the Deputy Commissioner appears to believe that the Penal Code cannot be brought to bear in forest cases; as the question has been referred to me both by Mr. Ponsonby and the Inspector General of Police, I have requested the latter officer to get the opinion of the Judicial Commissioner on the subject.

14. Crimes committed against the forest laws, are so difficult of detection that though in favour of leniency where forest rules only are broken I consider it unwise to inflict frivolous punishments awarded by the lower courts when crimes punishable under the Penal Code are committed.

Section 4.—Management and Improvement.

15. The revenue survey is still incomplete. Major Anderson has during the cold weather been on the mountain ridge making arrangements to determine the boundary which follows the watershed between Nepal and Oudh, in the Gondah and Baraich Divisions.

16. Valuation surveys have now been taken for the last three years in the Kheree Division, and I consider that with the acreage surveyed we have sound data to go on, as the division lines have been cut in all portions of the forest. The abstract of forest surveys will be found in Appendix VI.

17. The surveys in the Kheree division show 3·29 1st class and 5·58 second class sál trees per acre, and the acreage surveyed during the last three years *viz.*, (544 acres) show 3·65 1st class and 5·34 2nd class trees per acre, with plenty of younger trees to take their place. The surveys in Baraich show a want of young trees, but seedlings may be able to come up when some of the first class trees have been felled and the block felled in, has been closed for some time.

18. In order to make valuation surveys more available for the better management of the forests, I had the rings of 50 logs counted (see Appendix VII) and from this it will be seen that the average number of rings or years per inch of radius is about five.

19. In paras. 83 and 84 of my progress report for 1867-68, going on the safe side, I calculated that if the trees grow one-tenth of an inch in radius per annum, we could still go on cutting 3,000 or 4,000 trees

per annum with perfect safety, but as I consider that our object is not only to work for safety, but to get the annual yield of forests, the plan of operations can be very much increased, perhaps not however till more data on the growth of trees have been obtained.

20. This year the main Bhadee Tál line 100 feet broad has been cut, the straight line shown in 1867-68 report map has not exactly been adhered to, and after reaching the Bhadee Tál phanta, (open grass plain) the line has been run, connecting the different phantas, thus saving the expense of cutting much valuable forest and opening out the phantas, from which the neighbouring population get their grass for thatching, to the open cultivated country outside.

21. A fifty (50) feet line has been run joining the 1st and 2nd Mohan roads, and the 5th and 6th Sohelee lines have been completed up to the Nepal frontier, as has also the main Gwareeghát line, from the spot, it changes its direction near Khujooria.

22. The below statement shows the amount of line cutting in the Kheree Division.

	Breadth.	Forest miles.	Grass miles.	Total miles.
1. Bhadee Tál Main line, ...	100	12	5½	17½
2. Main Gwareeghát line, ...	100	4½	none	4½
3. 1 and 2 Mohan cross road, ...	50	1¼	¼	1½
4. 5 Sohelee line, ...	50	1½	none	1½
5. 6, Do., ...	50	¼	¾	1
6. Doodooa, Pullea line, ...	30	1	1¼	2¼

23. In the Baraich Division a one hundred foot line, 3 miles long has been cut dividing the 6 and 7 Sections, and 13 miles long 100 feet line have been cut in the 8th 5th and 4th Sections along the Nepal boundary, this is of great use as the clearance enables us to stop fires from the Nepal forests coming into our own.

24. The Main Gwareeghát line has been made drivable for 15 feet in the centre to Khujooria 10½ miles in length, and about 2¼ miles* of the Main bhadee Tál line are ready. The Musan Khum line 1½ miles in length has also been cleared to 15 feet and made drivable.

* Since completed to the Sonareepoor Phanta.

25. The wells have been found of great use, the carters and working parties gather round them, and as it is possible to lay out daks of horses on the road, the officer in charge can get through double the amount of work that he could had he to go the whole way on elephants: they will also do hereafter for watering engines, for the roads, with very little expense could be made fit for traction engines which I hope ere long to see doing the principal part of the carriage of timber and fuel.

26. This year most of the trees felled in the lines were barked, and it was found much easier to take the bark off the tree directly it was felled than it was after a week or two when it adhered to the wood. In the Kheree Division 11 miles of 100 feet road were barked and logged

and in 4½ miles the logs were cleared from the centre 15 feet to allow of traffic before the stumps were cleared out.

27. This year the snags in the Sohelee have been taken out from Suthiana Depôt to Bundee ghât, a distance of 15 miles, the work is still in progress and I hope the river will be cleared to its junction with the Korially at Shitabah ghât before the rains. Captain Losack and myself went down the river in a canóe from Suthiana Depôt to Khyreeghur, from which place numerous logs were rafted last year to Byram ghât by a dry wood contractor.

28. The river is about 100 feet broad with an average depth of 3 feet water, but the two impediments to navigation are the snags and shallows. The shallows are sandy and I fancy in many instances formed by the snags, and I am pretty confident that they will be obliterated by the constant rafting, for the boatmen when they come to a shallow, put their rafts sideways to the stream and themselves facing upstream they push them back and the water washes up the sand underneath the logs and the raft gradually progresses, the sand that is washed up will be conveyed to deep water and the bottom of the river made more level, for in some places there are pools of 10 and 20 feet deep.

29. Logs have been already rafted from Suthiana to Doodooa where the river is smaller than below Doodooa as the waters of the Newra nullah joins the Sohelee a little above the latter place.

30. There will be no difficulty whatever about rafting down after the first few days of heavy rain, the banks of the river are very regular and though in heavy floods the surrounding country (long grass and Khair and Sissoo forest) is 5 or 6 feet under water, the usual height of the banks is about 12 feet above cold weather water level, and the snags being removed and the shallows (that are in the cold weather) being well covered with water, the river will be like a navigable canal.

31. In fact the Sardah river need never be used again, which is a great blessing as the river is a very unsatisfactory one to deal with; during the past rains there were some 500 logs ready for rafting at Muroucha on the low bank under the proper left high bank of the river, the river set to the left side and the logs had to be carried up to the high ground, when the rains were over a sand bank was deposited under the left bank and the river was flowing more than a mile away nearer the proper right bank, leaving a tract of land over a mile between the high ground and the present bed of the river, and over this sand the 500 logs had to be re-carted.

32. The rate per log for rafting from Muroucha ghât *via* the Sardah is Rs. 6-9-0 to 7 Rupees, and in order to induce boatmen to take to the new route Rs. 8 were given per log from Suthiana to Byram ghât. Contracts at Rs. 7 from Suthiana, and Rs. 6 per log from Doodooa have since been given, and boatmen are wanting more contracts.

33. By using the Sohelee instead of the Sardah, we can work with half the number of carts or do double the work with the same number

and even putting aside less cost of rafting by the Sohelee we shall save about 10,000 annually in land carriage.

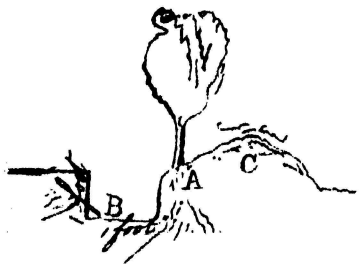
34. If this is capitalized at 5 per cent. the improvement caused this year in carriage of logs alone may be valued at 2 lacs of rupees, but as the clearing the river will allow fuel to be profitably sent to Byram ghât, the capital value of the forests will have been improved to a much larger extent. In a few years the clearing of the river will add greatly on the revenues, and I think it only fair that some credit should be taken for the improvement during the year under review.

35. One of the great advantages of the Sohelee route is that the officer in charge of the division can himself supervise the work which he could not well do on the Sardah and which was impossible on the Kunhout route.

36. With a view of opening out the forests for fuel I inspected the Jowraha Nala from Chunga ghat near Bhadee Tal phanta to its junction with the Sohelee, for the first mile the river was very shallow and so choked up with young fallen jamun trees which grow in profusion on the banks that I had to cut my way through them, afterwards the river widened out into a long deep pool several miles in length, about 100 feet broad and 20 to 30 feet deep, if not more. From Chunga ghât to Manjha ghât; about 8 miles there is only one place at present known for crossing elephants *viz.*, Pussiapoor ghât, and here in the cold weather the water wets the elephants' guddees.

37. The river contracts about Manjha ghât where the forests end and below it the river is very shallow in places. When fuel is taken out of this portion of the forests, it will be worth while to make a cut from the Jowraha near Manjha ghât to the Sohelee, as the distance is less than half a mile and the country only 12 feet above cold weather water level, at present the drainage of the forests comes down the large pool of the Jowraha above-mentioned, and at the narrow part at Manjha ghât over flows into the Sohelee, so the cut besides being useful for navigation would aid the drainage in the rains and a small canal could be taken out above Manjha ghât which could irrigate almost the whole of the Raja of Khyreeghur's estate. Having been an irrigation officer I can speak with confidence on this subject.

38. In my last report, para. 37, I mentioned that khair and sissoo had been sown on 3 systems, the trench, broad cast, and plot system. Though the seed came up in some places in each system, I am of opinion that in the wet grass lands the seed should be sown on the edge of the earth thrown up, that the earth should not be returned to the hole or trench, from which it is first thrown. The seeds being sown in the ground higher than the common level, do not rot, and the holes being left by collecting water keep the roots nicely moist. During September I inspected the fuel plantations in the Punjab, and I find that the Punjab forest officers have now given up Dr. Stewart's system of re-filling the trench: in the terai the water lodges too much round the roots of the young trees when the earth is re-filled, as there is a hollow caused by the whole of the earth not being replaced.



39. The present Punjab system is shown in the diagram. The earth is thrown out of the trench B and thrown up at C, the seeds are sown at A in the new earth, irrigation is carried on in the trench B when necessary, and the roots of the plants get plenty of moisture without the seedling rotting from too much moisture at first.

40. The growth of Sissoo and Babool is exceedingly rapid under this system in the Punjab. I have not yet been able to get the detailed transaction of the plantations in the Punjab.

41. If we get the lands about Bhira for fuel reserves we shall not require to plant outside the forests. The only plantation I have recommended has been near Fyzabad, and though in para. 9 of Secretary to Chief Commissioner's No. 2057 of 24th September 1869, it is stated that sanction has been given for taking up the Manjha lands there, this land cannot be made over to the Forest Department till the regular settlement.

42. As wood possessing floating properties will hereafter be extremely valuable in the vicinity of the Sohelee I have had some young bamboos (the large hollow sort) planted near Newul Khar and by last accounts are doing well, They were brought from Mujhgain in the terai about 14 miles off, and arrangements have been made to collect the seed from a bamboo which I saw in flowers there a couple of months ago.

43. The miscellaneous forest produce was leased as last year, but for Rs. 74,790 instead of 55,352 being an increase of Rs. 19,438 as will be seen in Appendix VII. I endeavoured to get the Mahárajáh of Bulrampoor to pay a reasonable price for the minor forest produce of the Toolseepoor forests *viz*: the rates obtained in the neighbouring district of Baraich, by which a further increase would have been obtained but the Forest Department has I am sorry to say to submit to a loss of about Rs. 20,000 till the regular settlement, which it is sincerely hoped will be soon completed.

44. The sum obtainable from minor forest produce will fluctuate. The same sums may not be obtainable when most of the dead, fallen and standing trees have been taken out and though there will be annually trees newly dead there will not be the same pick for dry wood contractors as there formerly was, but the smaller wood will be becoming more valuable as there will be a market at Byrámghat for fuel and arrangements are being made to improve the navigation.

45. With reference to Chief Commissioner's remarks (that he does not understand the difficulty in closing portions of the Khair and Sissoo forests) on para. 36 of last year's report, the Sissoo and Khair forests have not yet been made into blocks but a commencement has been suggested in this office letter No. 7, of 16th April 1870. To derive any benefit from the closure, the closure must be complete and men must be posted along the lines from the Sohelee to the high ground, and no one allowed to enter the block; when the lines are cut and roadways

made along them, there will be no excuse for people leaving the roadway; by the roadway being kept clear, fires will be prevented from coming from without.

46. Creepers have been nearly entirely removed from the Baraich division with the exception of the 8th section, the boundary between which and Nepal has not yet been exactly determined.

SECTION 5.—YIELD AND WORKING OF THE FORESTS.

47. The felling was continued from the part left off in the year before, viz. in block 5 of report map and was continued in block No. 4, 2,912, trees were felled during the year under review, and some more which not being numbered will be credited to the present year.

48. The timber promises to be good on the whole. I had these trees logged to the longest length possible, but as the carters cannot or will not (on account of danger to their bullocks) cart over certain lengths, portions will be taken off in such a manner as to cause best logs.

49. Three thousand one hundred and ninety-three logs were carted out of the forests during the year. Some have been forwarded to Byrámghát and others are in transit.

50. The Sárdah depôts have been done away with, a few logs are in transit to Cawnpoor. It is hoped that the Cawnpoor depôt and consequently the Shahjehanpoor depôt will be closed during the present year and the close of it, that there will be only the regular sanctioned depôts on the Sohelee and Gogra.

51. The roads referred to in para. 52 of last year's report have not been improved, though Captain Losack has had the roads surveyed and was ready at any time to help the district officer in straightening and improving this, and cut through a strip of village forest with the permission of the proprietor to bring the forest road to the open country. Owing to the discontinuing the Sárdah route, the timber traffic of the Oudh Forest Department will not be affected, but the roads should be improved for the benefit of the people who take rice, tobacco, timber, &c., from the forest and their vicinity across the Sardah.

SECOND PART.—GENERAL.

I.—FINANCIAL RESULTS.

52. The receipts during the year are for—

	Rs.	A.	P.
Timber sub-head I, ...	24,219	11	4
Miscellaneous II to IX, ...	82,602	2	0
Total, ...	1,06,821	13	4
Deduct expenditure, ...	1,05,167	12	0
Leaving a balance of, ...	1,654	1	4
But the assets of the year are greater by, ...	43,553	13	0
Thus the net revenue of the year is, ...	45,207	14	4

53. If to the surplus allowed by the Government of India, in No. 41F of 18th June 1870, *viz.*, ... Rs. 2,11,254 0 0

The net revenue of the year be added, the financial results up to date will be, ... „ 2,56,461 14 4

54. Little if any timber has been sold this year, partly on account of the deficit and partly because of the change of route from the Sárdah to the Sohelee, however, the stock has been greatly increased in value.

55. The detail of figures is given in the six prescribed forms in Appendix No. IX.

56. The Chief Commissioner has been addressed on the subject of the old contractor's accounts. The losses entailed by dealing with petty contractors is very annoying, but is not such a losing concern as paying large contractors heavily. I tried to get a contractor to take over our carting and felling but his rates were 25 per cent in excess of ours. Our rates are low but once raise them and they will not go down again. If we raise them they will be raised elsewhere, and the Department Public Works, will have to pay all the dearer for its timber.

57. The miscellaneous revenue obtained from leases has increased about Rs. 19,000 above last year's revenue, as before stated.

II.—General Remarks.

58. Not much timber was brought in from Nepal during the past year.

59. The accounts have been pretty punctually submitted, but I have represented to the Chief Commissioner, that as long as the Conservator is moving and the assistants also are moving about, delays must occur.

60. I regret that the returns from the Deputy Commissioners of districts are not punctually or correctly submitted. I have been urging for the last 6 months to get the revenue returns properly submitted, and have been in correspondence with the Financial Commissioner on the subject, and submitted a form which will check the accounts both for the Accountant General and Forest Department. The plan may perhaps be put into operation during the present financial year.

61. The following table will show the dates of officers returning from the forests last hot weather, and their starting for the forests for the working season. They are all out now (18th April) except Captain Losack, who has come in to Lucknow to take over charge. My medical adviser told me to go out late and come into a station early on account of my health. So I left Lucknow on the 1st December and returned on the 30th March.

	Came to station.	Started for forests.
Captain Losack, ...	25th May.	7th November.
Mr. Ponsonby, ...	31st May.	28th October.
Mr. Forrest, ...	5th June.	20th October.

62. I spent all my time in the Kheree division, which is the most important, and chiefly looked after water communications and rafting experiments.

63. Captain Losack was several times in all parts of his division, he was aided by Mr. Richardson (lately in the Police Department and who succeeded Mr. Dodsworth), but as he was young and new to the work, he was not of much assistance but if he will take interest in his work, he should make a good forest officer.

64. Mr. Ponsonby's time was mostly taken up in the eastern portion of his division which is a long and straggling one, it would be only fair to this division to have another assistant to take charge of half of it.

65. Mr. Forrest's time was mostly taken up looking after waste lands and cultivation in the vicinity of the forests in his division in order that the Forest Department may lose as little land as possible, whilst the demands of the Mahárája of Balrámpoor may be satisfied.

66. I have again to thank Captain Losack for the way he has worked during the past working season, though hindered at the commencement of the season by a very serious illness he has succeeded in doing more work than has ever been done before, and it has been done well.

67. Messrs. Ponsonby and Forrest have performed the work entrusted to them, and I have recommended the latter for the promotion which he expected. I have also to bring to the Chief Commissioner's favourable consideration the services of Baboo Kunhya Lall, the head clerk in my office, who has not only helped me greatly in my correspondence but has elaborated all the accounts quickly and correctly, and Baboo Rughobur Dial of the Kheree Division Office, who has greatly aided Captain Losack both in office and out-door work, and should the plan of employing natives in superior positions be adopted as proposed, I hope to see the former filling the appointment of Sub-Assistant Conservator in charge of the Direction Office at Lucknow, and the latter Sub-Assistant Conservator in the Kheree Division.

68. I am now about to proceed to England on medical certificate for 18 months, and I trust that the Chief Commissioner will believe that any short comings in this report are from the haste with which it has necessarily been written. I am glad to see that Government thinks that the preparatory measures for initiating a systematic working of the Oudh forests are in a forward state, a little more time is wanted, and I trust that the effects of the present working will be shown a few years hence by a considerable increase to the present revenue.

E. WOOD, CAPTAIN,
Conservator, Oudh Forests.

Minute by the Chief Commissioner of Oudh on the Annual Progress Report of Forests, Oudh, for the year 1869-70.

1. Orders have already been given in accordance with the joint recommendation of the Financial Commissioner and the Conservator, for the transfer to the Forest department of some of the resumed grants enumerated in Appendix II, and which are specified in the margin. The Chief Commissioner is anxious that the whole of this tract shall, if possible, be managed by the Department, as it is better suited for the growth of sál wood than for ordinary cultivation. But the Financial Commissioner has lately reported that subsequent to the resumption of the grants from the original grantees, some of them have been re-let to zemindars and cultivators. The Chief Commissioner regrets that this should have been done, and he has directed that a further report showing the nature of the interests which have been suffered to grow up, be made; and on receiving this, it is his intention to give final orders respecting the destination of each grant. Where it may be considered inexpedient to disturb the present cultivators, it may perhaps be preferable that they should be continued in their holdings under leases from the Conservator as suggested by Dr. Brandis in his letter addressed to this office, dated 23rd June 1863 (para. 98).

No. 62 Grant No. 5, Mr. Kavanagh.
" 26 " " 7, " Meaken.
" 27 " " 8, " Do.
" 47 " Dulha. " Read.
" 51 " Hearsey Nugger, Mr. Read.

2. *Para.* 3. The Rajgurh Singha tract is not so well adapted to the purposes of the Department, and the Chief Commissioner has lately sanctioned its occupation by the Raja of Búndí in satisfaction of a grant of waste land sanctioned for his maintenance by the Government of India.

3. *Para.* 5. A decision on the claims of the Mahárája of Balrámpúr is delayed pending the survey of his estate, and it is not intended that more waste should be given to him than he can show an equitable title to.

4. *Para.* 10. As the formation of fuel reserves is surrounded with practical difficulties, the Chief Commissioner thinks that the working of the three mile rule should have a further trial; and he is now of opinion that a commission for the investigation of the prescriptive rights of villagers might increase without allaying whatever discontent at present exists, and he is not, on mature consideration, prepared to recommend it. He would prefer that the Commissioners of Seetapoor and Fyzabad should deal with any questions (not cognizable by the courts) which may arise, in communication with the Conservator.

5. *Para.* 11. The protection to be provided against fires through the instrumentality of Forest Watchers will involve a large expenditure, and the Chief Commissioner reserves his opinion on the scheme pending its review by Dr. Brandis.

6. *Para.* 12. The Chief Commissioner declined to allow the exercise of magisterial powers by Mr. Ponsonby until he shall have passed examinations in proof of his qualification.

7. *Para.* 14. The Chief Commissioner does not clearly understand this paragraph, or why the Conservator should be charged with the infliction of punishments awarded by the Lower Criminal Courts.

8. *Para.* 27. A report should now be made whether the expectation of the Suhéli being cleared of snags up to the point of junction into the Koriali, has been fulfilled or not.

9. *Paras.* 30 to 35. The superiority of the Suhéli to the Sardah for rafting purposes has been clearly made out, and its clearance of snags is of great practical utility.

10. *Paras.* 36 to 37. The cut proposed to be made from the Jowráha Nála to the Suhéli seems to promise well. A plan and estimate should be submitted for sanction prior to the work being undertaken.

11. *Para.* 43. The miscellaneous forest produce was leased for Rs. 74,790 against Rs. 55,352 the year before. The increase will probably not be permanent. The term "loss" seems erroneously applied to the Rs. 20,000 not obtained for produce already farmed to the Mahárája of Bálrampúr. The disappointment an heir suffers when the possessor of an estate lives longer than was expected, might as well be called loss.

12. *Para.* 48. The number of trees felled is taken at 2,942, but the value of the logs must be diminished by their being shortened to suit the whims of the carters. The number of logs carted out of the forests was 3,193. A report should be made when the depôts at Cawnpoor and Shahjehanpoor have been finally closed.

13. *Para.* 52. The net revenue of the year under report is stated at Rs. 45,207-14-4, and an aggregate profit on the operations is shown of Rs. 2,56,461-14-4. Little timber was sold but the stock in hand was added to.

14. *Para.* 56. The reference on the subject of the contractor's old accounts was disposed of by this office No. 249 of 28th April 1870 and all endeavors are being made to adjust the balances as soon as possible.

15. *Para.* 59. The Chief Commissioner cannot admit the locomotion of the Forest Officers as a valid excuse for unpunctuality in the rendition of their accounts.

16. *Paras.* 61 to 62. The Conservator was prevented by ill health from spending the full time in the forests. He did not visit either the Baraich or Gondah districts. This should be done this year by his *locum tenens.*

17. Captain Losack's work is spoken of in favourable terms and he is entitled to credit for his exertions.

18. Although the Conservator has recommended Mr. Forest for promotion, the report gives no evidence of zeal on his part or on that of Mr. Ponsonby, whilst Mr. Richardson's inexperience is said to render him of little use. These young Officers must understand that the Chief Commissioner expects better things from them in future.

19. The Chief Commissioner regrets that illness has obliged Captain Wood to take sick leave to Europe. His report shows that his work has progressed fairly during the past year.

LUCKNOW:
7th July 1870.

R. H. DAVIES,
Chief Commissioner, Oudh.

APPENDIX II.

List of waste lands recommended for fuel, and grazing reserves in Kheree District, right bank of Sarda or Chowka.

Fuel Reserves, viz: mostly Sál, Arseyna, Ilur, Buhaira, Amultas, &c., &c.

No.	Name of tahsil and perganah.	Name of grants.	Name of grantees.	Area in acres.	Remarks.
4	Tahsil Mohamdí, Perganah Aurungabad,	Hindunagar,...	Hindú Singh,...	440 0 0	
5	Do. do., ...	Kusun, ...	Government, ...	225 0 0	
6	Do. do., ...	Ashaknagar,...	Ashakali ...	1,142 0 0	
7	Do. do., ...	Khanpúr, ...	Gopal Singh, ...	805 0 0	
8	Do. do., ...	Gularahá, ...	Government, ...	520 0 0	
9	Do. do., ...	Kácm Saráe,...	Do, ...	632 0 0	
10	Do. do., ...	Sheopuri, ...	Do., ...	1,841 0 0	
11	Do. do., ...	Sallahpúr, ...	Do., ...	475 0 0	
12	Do. do., ...	Dhúká, ...	Jankipurshad,	2,752 0 0	
13	Tahsil ditto, Perganah Kasta, ...	Guneshpúr, ...	Jawahirlal, ...	721 0 0	
14	Tahsil ditto, Perganah Magdapúr, ...	Hakimpúr, ...	Government, ...	339 0 0	Available.
15	Do. do., ...	Munda, ...	Do., ...	505 0 0	
16	Do. do., ...	Hurinagar, ...	Do., ...	655 0 0	
17	Do. do., ...	Gangapúr, ...	Do., ...	1,065 0 0	
18	Do. do., ...	Ashrafnagar,...	Raja Mushsufali Khan, ...	1,675 0 0	
19	Tahsil ditto, Perganah Itwa Piparia, ...	Sahibganj, ...	Mr. Carnegy, ...	5,315 0 0	The term of 6 years has expired, and the land has not been cultivated according to the conditions.
20	Do. do., ...	Faridpúr, ..	Mr. Berkley, ...	3,205 0 0	Do. both these likely to become available.
21	Do. do., ...	Ibrahimpúr, ...	Fida Hosain, Khan, ..	4,390 0 0	
22	Tahsil Gola, Perganah Bhur, ...	Allenganj, ...	Mr. Allen, ...	5,180 0 0	3 instalments are yet due.
23	Do. do., ...	Lokcha, ...	Mr. Menzies, ...	10,115 0 0	Mr. Menzies died in July 1868, 4 instalments due.
24	Do. do., ...	Amirgarh, ...	Do., ...	2,665 0 0	The term of 6 years has expired, yet the land has not been cultivated according to conditions.
25	Do. do., ...	Kiritpúr No. 6,	Do., ...	6,365 0 0	Do. do. do.
26	Do. do., ...	Grant No. 7,...	Mr. Meaken, ...	4,075 0 0	Two instalments due
27	Do. do., ...	Grant No. 8, Heerapúr,...	Do., ...	4,475 0 0	Being resumed and will be available. Do.
39	Tahsil ditto, Perganah Aliganj, ...	Buhnapúr, ...	Mr. A. Foy, ...	2,435 0 0	Two kists still due. Mr. Foy's two grants may be resumed, but nothing certain yet about them.
40	Do. do., ...	Ahmadabad,...	Government, ...	4,468 0 0	Available.
41	Do. do., ...	Asadnagar, ...	Do., ...	5,079 0 0	
42	Do. do., ...	Rahimnagar,...	Ibrahim Khan,	1,090 0 0	
43	Do. do., ...	Fazalnagar, ..	Mr. Foy, ...	1,890 0 0	Two kists still due.
44	Do. do., ...	Bahadarnagar,	Mr. Menzies, ...	1,221 0 0	Mr. Burdur is in possession of this grant. Two kists are due.
45	Tahsil ditto, Perganah Karanpúr, ...	Wazirnagar, ...	Government, ...	3,332 0 0	Available.
46	Do. do., ...	Punarbhu, ...	Mr. Hamilton,...	4,475 0 0	The term of 6 years has expired, and yet the land has not been cultivated according to conditions.
		Carried over, ...		83,567 0 0	

APPENDIX II.—*(Continued.)*

No.	Name of tahsil and perganah.	Name of grant.	Name of grantees.	Area in acres.	Remarks.
		Brought forward, ...		83,567 0 0	
47	Tahsil Gola, Perganah Hyderabad, ..	Dulha, ...	Mr. Read, ...	3,230 0 0	Two instalments are over due, both may become available.
48	Do. do., ..	Dulahi, ...	Mr. Allen, ...	3,112 0 0	3 Kists are over due, may be resumed
49	Do. do., ..	Abdullanagar,	Government, ...	721 0 0	Available.
50	Do. do., ..	Marha, ...	Mr. Martin, ...	3,245 0 0	This has been granted according to the old rules and the term has not yet expired.
51	Do. do., ..	Hearseynagar,	Mr. Read, ...	3,450 0 0	1 Kist still over due, may become available.
52	Do. do., ..	Bhikampúr, ...	Mr. Carew, ...	8,605 0 0	This has been granted according to the old rules and the term of 6 years has expired.
53	Do. do., ..	Thurhurnpúr,	Mr. Powell, ...	4,575 0 0	Do do. nothing certain yet as to these 2 grants.
54	Do. do., ..	Doddpúr, ...	Mr. Dodd, ...	3,995 0 0	3 Kists are over due, may be resumed.
55	Do. do., ..	Rampúr, ...	Mr. Smith, ...	2,235 0 0	1 Kist still due, nothing certain.
56	Do. do., ..	Bunhudeli, ...	Mr. Carnegy, ...	2,353 0 0	
57	Do. do., ..	Sitalpúr, ...	Mr. W. Hearsey,	1,255 0 0	Granted according to old rules, term of 6 years has expired yet the land has not been cultivated according to conditions nothing certain yet in respect to this grant.
58	Do. do., ..	Londonpúr, ...	Government, ...	6,700 0 0	Available.
59	Do. do., ..	Racpúr, ...	Rao Toolaram,	2,070 0 0	
60	Do. do., ...	Grant No. 3,...	Mr Martin, ...	5,272 0 0	1 Kist still due, nothing certain.
61	Do. do., ...	Do. 4,...	Mr. Menzies, ...	2,555 0 0	Mr Menzies died in July last, 4 kists still due likely to become available.
62	Do. do., ..	Do. 5,...	Government, ...	3,703 0 2	
63	Do. do., ...	Do. 6,...	Mr. Connors, ..	760 0 0	
64	Do. do., . .	Do. 7,...	Do., ...	5,011 0 0	
65	Do. do., ...	Do. 8,...	Mr. Menzies, ...	5,000 0 0	Do. do. likely to become available.
66	Do. do., ...	Do. 9,...	Do., ...	5,014 0 0	Do. do. do.
67	Do. do., ...	Do. 11,...	Mr. Martin, ..	5,202 0 0	1 kist still due, nothing certain as yet.
68	Do. do., ...	Do. 13,...	Mr. Connors, ...	6,022 0 0	2 kists due, do.
		Total, ...		1,67,657 0 0	

Grazing Reserves—either grass or with few if any trees.

28	Tehsil Gola, Perganah Bhur, ..	Grant No. 1,..	Government, ..	1,492 0 0	Available, but leased out for 3 years to Talookdar of Bhira.
29	Do. do., ..	Do. 2,..	Do., ..	920 0 0	
30	Do. do., .	Do. 3,..	Mr. D. Taylor,..	1,613 0 0	This is granted according to old rules term not expired.
31	Do. do, ..	Do. 4,..	Government, ..	5,073 0 0	
32	Do. do., ..	Do. 5,..	Do.. ..	815 0 0	Available, but leased for 3 years to Talookdar of Bhira.
33	Do. do., ..	Do. 7,..	Do., ..	1,555 0 0	
34	Do do., ..	Do. 8,..	Do., ..	1,205 0 0	
35	Do. do., ..	Do. 9,..	Mr. D. Taylor,..	540 0 0	This is granted according to old rules term not expired.
38	Do. do., ..	Do. 12,..	Do., ..	1,867 0 0	Do. do. do.
		Total, ...		15,080 0 0	

* Grants Nos. 10 and 11 are recommended for cultivation.

APPENDIX III.

Report on the grant_____called No. 5 allotment as one of the comtemplated Fuel Reserves in the vicinity of Bhira, Allyganj, and Gola.

DEPUTY COMMISSIONER'S REMARKS.	CONSERVATOR'S REPORT.
PARA. 1.—I perfectly agree in the remarks of the Conservator of Forests, this grant is entirely covered with forest trees. Its area is about 20,000 bighas kham or 3,450 acres. No cultivation. Climate decidedly unhealthy; and I think it will be far more advantageous to hand it over to the forest department, owing to its unhealthiness cultivators cannot be induced to squat it.	1. The grant is unhealthy as are all the rest of the grants containing sál and fuel trees in the vicinity of Bhira. If the grant be resold the chances are that the person who pays the first instalments will not pay up the remainder as has been the case in many instances in the adjoining grants. If resold on the terms of payment in instalments, the purchaser can cut up the timber on the estate and then leave it in a ruined condition as has already been done. The defaulter can at present draw revenue from a grant that he has not paid for and I believe, many are now drawing revenue (for green and dry wood, grazing, and miscellaneous forest produce) in estates, which they have either paid nothing for, or for only a small portion thereof. This could occur in this grant and cause a loss to Government.
PARA. 2.—Certainly labour is both dear and scarce, and this is owing to the unhealthiness of that part of the district, where these grants are situated the soil is most suitable for timber trees, but not suitable for crops.	2. Labour is very dear and scarce and advances have to be made by grantees to assamís who may die or remove from the grant. The soil suitable for timber trees is not so suitable for grass, the soil when the top surface is exhausted by a few crops has to lay fallow for some years. In the neighbourhood of the forests large areas of such fallow land will invariably be seen.
PARA. 3.—I agree with Captain Wood. The cost of rooting out the sál is so excessive that grantees are unable to meet the expense.	3. The land is not only covered with sál but is peculiarly adapted for the growth of it, and in clearings made some years ago in similar grants, the clearings have gone back to jungle. The cost of rooting the sál out is excessive. Even if a small crop is obtained a greater part of it is destroyed by the game in the forest.
PARA. 4.—I would certainly make this grant over to the forest department. It would be far better to do so, and reserve it for fuel plantation than to make it over to private individuals.	4. By making over this grant to the forest department, there will be several advantages obtained. The canal will pass through this grant and will convey the fuel to distant parts of the province at a small cost, and will increase the supply of fuel for the railway consumption, which when the Oudh and Rohilkhund Railway, is in full working will consume 1,00,000 maunds if not more of wood per mensem or twelve lacs of maunds of wood per annum.

PARA. 5.—This is correct. It forms a portion of a dense belt of jungle running along both banks of the Kutna river from one end of the district to the other.

5. The grant is not an isolated one, but forms part of a large belt of forests which the Conservator has recommended to the Chief Commissioner for a fuel reserve.

PARA. 6.—There is certainly no want of timber trees in this district, but still if this grant is made over to the forest department, the timber will be far better conserved than if sold or made over to private individuals.

6. The Financial Commissioner, appears to take great interest in the planting of trees in the province. This grant contains more timber than the Financial Commissioner will get planted by district officers in many years and it would hardly seem wise to be paying for planting inferior trees on one hand, and handing over a large tract of land covered with superior wood trees for the express purpose of the destruction of the trees.

7. If the Financial Commissioner had ever seen a forest clearing, he must have seen that most if not almost all the wood cut in the clearings is burnt where it falls, a great loss of fuel to the province.

8. By proper conservancy and proper working of the forests a large supply of useful timber as bullies, &c., will be obtained for the neighbouring population as well as fuel.

PARA. 9.—I perfectly agree with Captain Wood.

9. This grant forms part of the large belt it is so desirous of keeping intact for the purposes of equalizing the volume of the Gúmtí and raising the height of water in the neighbourhood. Should this belt be cleared away for cultivation the Gúmtí will probably change from a navigable river to a nallah giving a torrent of water in the rains, and a very small supply in the hot weather.

PARA. 10.—I also agree.

10. The supply of wood fuel to the railway alone is a subject of great importance to the province, and this grant is one from which the forest department could draw a supply of the fuel. I am led to believe that four annas worth of sál fuel at Rs. 25 per 100 maunds, will give the same amount of steam as Rs. 1-4, worth of coal if the forest department can supply the twelve lacs of maunds of fuel per annum, a sum of Rs. 3 lacs will be spent in the province, whereas if coal has to be used 15 lacs of Rs. per annum will have to be spent out of the province, in the North-West and Bengal.

PARA. 11.—I concur in these remarks entirely, there can be no doubt of the advantageousness of making over this grant to the forest department. It will be far better to do so than either to sell or give it on leave to private individuals. I am of opinion it should at once be included in the reserved forests.

11. By the reservation of this grant for fuel a larger supply of trees and wood fuel will be able to be utilized by the population from their groves, and a larger portion of the cowdung can be utilized in its legitimate purposes of enriching the soil.

12. The treatment of this grant would for the most part be the coppice system in contradistinction to the lofty forest system carried on in the Government forests. In England where oak is coppiced one of the chief profits is from the bark of the wood, as the supply of bark of babúl will get used up by diminishing the quantity of babúl cut for the railway, a substitute will be required. The chief expense of the Government Tannery at Cawnpoor I am led to believe is the purchase of bark, and Captain Stewart in charge of the tannery is making arrangements for a supply of bark from the sál and arseyna trees (not from the trunks, but from the branches felled in the Oudh forests,) and also wants the bark of amultas cathartocarpus fistula. In this grant there are large quantities both of arseyna and amultas, and fuel and barking operations could be carried on at the same time, and profitably, as water carriage, the cheapest carriage there is, will be available for the barks, to the very door of the Government Tannery.

13. The grazing of cattle is a point of vital interest in the province, as the quantity of cattle for ploughing, must be kept up: if the grant be brought under cultivation a certain amount of grazing ground will be lost to the province. As by proper forest conservancy certain parts of the forests will have to be closed periodically, the larger amount of grazing land, therefore, that there is under Government the larger will be the quantity of forest that can be protected. On account of the smallness of the Government forest in Oudh, the question of confining the grazing to certain parts of the forests is one of the greatest as regards the conservancy of the Government forests, and if this grant is sold to a private individual for cultivation, not only as I have said before will a certain area of grazing ground be lost to Government, but the same number of cattle will require to be fed on a smaller area and the difficulties of forest conservancy be greatly augmented.

This joint report is submitted to the Financial Commissioner with reference to the Secretary to the Chief Commissioner, Public Works Department's letter No. 769, dated 9th June 1869, to the address of the Financial Commissioner received with Commissioner's Circular docket No. 201-3158, dated 21st idem.

CAMP KOUR,
DISTRICT KHEREE,
The 15*th Jany.* 1870.

(Sd.) W. C. WOOD.
Offg. Dy. Commr.

CAMP PULLIA,
DISTRICT KHEREE,
The 1*st Jany.* 1870

(Sd.) E. WOOD, CAPTAIN,
Conservator, Oudh Forests.

APPENDIX No. IV.

Tabular statement showing areas of villages bordering on, and situated within Toolseepoor reserved Forest tracts in Districts Gondah and Baraich.

Forest Sections and Divisions.	Number of villages.	Cultivated.	Fallow and recently thrown out of cultivation.	Groves.	Waste.	Jungle.	Village site roads and paths.	Rivers, jhools, tanks, &c.	Total area.	Remarks.
Section 1 to 4, Gondah division, ...	77	49,073·17	4,758·2	345·8	13,867·9	10,106·14	1,166·11	2,570·15	81,888·16	† These villages border on reserved forest.
	14	21·18	3·0	..	559·7	95·13	..	..	679·18	‡ Deserted villages inside the forest which it is proposed to resume and make over to the Forest Department, and to give the Maharajah of Bulrampoor, an equivalent waste area elsewhere.
	19	3,150·17	545·13	3·6	1,792·16	273·0	65·11	259·2	6,090·5	* These are inhabited villages inside the forests owned by the Maharajah of Bulrampoor, and not contested.
Section 8, Baraich division, ...	21	15,805	2,380·5	92·8	11,684·7	277·70	411·15	1,127·13	31,778·18	§ 20 villages border, and one inhabited village is situa within reserved forests.

R. NICHOLSON,

Offg. Assistant Superintendent Settlement and Survey.

Abstract of para 7, letter No. 55, dated 29th March 1870, from Assistant Superintendent, Settlement and Survey, Oudh, to Commissioner, Fyzabad Division.

	Cultivation.	Waste.	Jungle.	Total jungle and waste.
Gondah Section, ...	49,095	14,428	10,201	24,629
Baraich do., ...	15,805	11,684	277	11,961
	64,900	26,112	10,478	36,590

APPENDIX V.

TERMS OF SALE.

OUDH FOREST PRODUCE.

As sanctioned by Chief Commissioner of Oudh, in Secretary D. P. W. to Chief Commissioner's letter No. 1580 *of* 17*th August* 1869, *to Conservator, Oudh Forests.*

1.—Leases are given for three species of Forest Produce,

1st for Dry Wood.

2nd for Grazing.

3rd for Minor Forest Produce.

(These species are hereafter defined), and in sections or blocks, boundaries of which are laid down in maps, and further defined in a document entitled "Boundaries of Sections," copies of which maps and documents may be seen at the Offices of the Deputy Commissioners of the districts and the Executive Officers of the Forest Divisions in such districts.

2.—A lessee of one species of Forest Produce will not be allowed to take another species of Forest Produce from his own section, unless he be a lessee of such Forest Produce, except as hereafter provided for (in para 4.)

3.—The lessees must comply with the Oudh Forest Rules as contained in No. 27 F. Revenue, Forests, dated the 24th September 1866, (with the exception of that part of Rule XII, which prohibits the burning of lime and charcoal, and grazing, which is for the present suspended and modified by 15 F. of 20th August 1868, by which Khair, (Acacia Catechu) and Tikoee or Huldoo (Nauclea Cordifolia) are added to the reserved woods.

4.—Lessees will be allowed grazing for cattle *bona-fide* employed in working their lease, and Forest Produce for fuel and domestic purposes within the forests; no charge shall be made for grazing or Forest Produce required by the Forest Department or its contractors by the lessee of such produce.

5.—All forest produce remaining within the boundaries of sections after the 30th of September next succeeding the date of sale shall revert to Government: but in order to allow lessees the benefit of water carriage, one locality or more (each not exceeding one acre in extent), will be allotted on application, to each section on the bank of a river, (though that section may not be on a river), on which the contractor may deposit his produce, which must be removed by water carriage beyond the limits of the forests before the 1st of April next succeeding the termination of the lease, after which time the forest produce that remains will revert to Government.

6.—The Government reserves to itself the right of catching wild elephants.

Mowah.

7.—The sale of Mowah fruit and flowers will take place separately in March or April.

Securities.

8.—Security must be given within seven days of the day of sale, for half the amount of the lease or leases taken. Security must be in cash, Government Securities, or Promissory Notes, accepted by two persons at least, who shall be approved of by the Deputy Commissioner; or public or Landed Security which shall also be required to be duly approved of by the Deputy Commissioner of the district in which the forest division is situated, and to which the lease refers.

9.—The Security will be returned within seven days of the payment of the second instalment.

10.—Lessees shall be responsible for the acts of their subordinates.

11.—Half the amount of the lease or leases taken must be paid into the Government Treasury at the stations where the sales take place, to the credit of the Oudh Forest Revenue, within seven days of the date of sale; and the remaining half between the 1st and 7th of April next succeeding the date of sale.

Purchase money.

12.—Such sales to take place at the Public Cutchery of the Deputy Commissioner after due notice of at least one month shall have been given. The leases are from the 1st of October in one year to the 30th September of the next.

Date and place of sale.

13.—A lessee shall not be entitled to any Forest Produce till he has paid the first instalment of purchase money, and signed an agreement on stamped paper of proper value, stating that he agrees to the terms of sale, when he will be given a document making over a section or block to him for the purpose or purposes for which he has taken a lease; should the lessee not pay the 2nd instalment within the time specified, the amount will be realized from his securities if possible, and further the lease will revert to Government, as well as any dues or forest produce collected after 1st of April remaining either within or without the Oudh Forest boundaries.

Dry wood.

14.—The meaning of the term dry wood is the timber of trees fallen or standing in which there is no vegetable life remaining.

15.—Lessees of dry wood may take away any dead trees of the reserved or unreserved woods, whether fallen or standing, but no logs or sillies of the reserved kinds from any part of the Forest (unless otherwise specified.)

16.—Lessees will be allowed to levy dues from villagers residing within three miles of the reserved forests, (but not from those within the outer boundaries of the Forest) who require dead timber of the reserved kinds.

17.—They will be allowed to levy dues from all people residing three miles, beyond the Forest boundaries, who require dead wood of the reserved or unreserved kinds for fuel or other purposes.

18.—The lessee for dry wood has no right to any trees felled by the Forest Department, even in cutting lines through the Forest.

19.—Lessees of dry wood will not be allowed to work up their timber in the Forest, further than converting the logs or dead trees into logs of convenient sizes for carriage, but one or more localities (each not exceeding one acre in extent) will be allotted, on application, in which timber may be deposited and worked into wrought timber as the Lessee desires; should any timber remain in this assigned locality or localities after the expiration of the lease, it will revert to Government. Should the Lessee manufacture his produce in any locality granted under Para : 5 the whole produce unremoved, (wrought and unwrought) at the expiration of the lease will revert to Government.

Grazing.

20.—Grazing means the browsing of grass (and of grass only) by cattle.

Lessees of grazing will be allowed to levy dues for all cattle grazing within the Government forests.

For the grazing of animals the *bona-fide* property of the residents of Oudh the undermentioned rates are not to be exceeded,

ANNUAL PAYMENT,

Buffaloes, ...	... 9 Annas	Each.
Bulls, Cows, Oxen and Horses,	... 3 „	„
Ponies, Mules, and Donkies,	... 1½ „	„
Sheep and Goats. ...	... 9 Pie	„

Lessees may make their own rates for cattle from other provinces. No charge however is to be made for animals born three months before the commencement of the lease, or during its duration.

21.—For cattle the property of residents of Oudh staying temporarily in the forests or passing through the forests and grazing therein, the lessees may take one-fourth of the above mentioned rates. Cattle staying over ten days in the forests may be charged the annual rate.

Minor Forest Produce.

22.—Lessees for Minor Forest Produce will be allowed to collect and sell all gums, resins, wax, honey, lac, fruits and seeds (except those of the reserved woods and Mowah), flowers (except Mowah), the unclaimed skins and horns of all animals dying in the forest, shells, minerals prepared or unprepared, grasses for ropes, thatching and domestic purposes ; of collecting roots, stems, leaves of plants that do not class as reserved trees, but no lessee of the Forest Produce whatsoever will be allowed to kill, destroy or damage, by lopping or barking or tapping any of the reserved trees, neither will he be allowed to cut down any living plant which will produce timber unless for the purpose of building temporary places of shelter for man or beast or forest produce within the limits of the Forest Sections.

23.—Lessees of Minor Forest Produce will not be allowed to take dues from villagers, residing within the outer boundaries of the forests or from those living within three miles of the forest boundary, for grass for thatching and other domestic purposes, the same not being for purposes of fodder.

LUCKNOW:
The 4th August 1869.

E, WOOD, CAPTAIN,
Conservator, Oudh Forests.

APPENDIX No. VI.

ABSTRACT OF FOREST SURVEYS.

KHEREE DIVISION.

No. of Survey.	Length.	Breath.	Sál.				Arseyna and other reserved trees.				Miscellaneous.			
			Over 6 in.	Over 4½ in.	Over 3 in.	Over 1½ in.	Over 6 in.	Over 4½ in.	Over 3 in.	Over 1½ in.	Over 6 in.	Over 4½ in.	Over 3 in.	Over 1½ in.
MAIN BHADEE TAL LINE.	feet.	feet.												
From Dodooa to Chota Pullia,	5,280	100	40	64	121	309	15	28	47	7	4	2	38	734
	5,280	100	40	57	94	165	33	21	17	14	3	6	53	819
	5,280	100	46	52	87	222	23	14	13	...	2	3	54	450
	5,280	100	53	68	164	333	23	17	30	4	1	2	60	479
	5,280	100	41	66	98	311	...	...	1	7	...	2	33	226
	300	100	....	5	1¼	57	...	..	...	...	...	...	...	8
From Chota Pullia to Bhadee,	5,280	100	57	53	241	239	...	1	2	2	1	1	48	376
	5,280	100	50	69	74	234	13	3	14	1	1	5	47	421
	5,280	100	44	75	127	314	4	4	5	1	1	2	47	287
	5,280	100	49	53	90	245	...	..	2	1	1	3	43	291
	5,280	100	21	61	177	333	10	23	26	7	1	9	36	467
	700	100	4	15	44	91	...	2	2	1	1	...	...	25
From Bhadee to Chowrala,	3,300	100	26	34	116	390	3	2	4	1	2	6	28	250
From Chowrala to Lodowra,	3,500	100	15	55	83	216	3	4	...	...	...	10	34	159
From Lodowra to Bhurowree,	2,301	100	25	22	31	94	...	2	...	...	...	5	13	60
Total, ...	62,603	100	511	749	1,558	3,553	127	121	163	46	18	56	534	5,052
MAIN GWAREE GHAT LINE.														
From Keerutpoor to Nepal Boundary,	5,280	100	21	111	182	542	6	19	60	239	...	...	28	381
	5,280	100	29	102	150	216	...	1	29	216	...	...	24	541
	5,280	100	44	76	72	291	1	8	94	109	...	...	14	596
	5,280	100	35	47	71	31	4	12	61	108	1	2	40	616
	1,380	100	10	20	28	15	...	5	20	32	...	...	4	131
Total, ...	22,500	100	139	356	503	1,095	11	45	264	704	1	2	110	2,265
Cross road 1st and 2nd Mohan,	5,280	50	20	27	53	115	3	...	1	...	3	9	42	276
	2,640	50	8	15	21	58	2	3	6	4	...	2	16	191
5 Sohelee line (ending,) ...	5,100	50	14	28	61	168	...	3	36	66	...	2	30	296
Total, ...	13,020	50	42	70	135	341	5	6	43	70	3	13	88	763
Total of 100 feet line halving length of 50 feet line 210·31 acres total,	91,610	100	692	1,175	2,196	4,989	143	172	470	820	22	71	732	8,080
Per acre, ...			3·29	5·58	10·44	23·72	·67	·81	2 23	4·18	·104	·337	3 48	38·41
3 years survey 544 acres per acre.			3·65	5·34	10·65	31·92	·87	1·43	3·46	6 22	·27	·93	5·93	40·05

BARAICH DIVISION.

6th and 7th Sections line,...	5,280	100	30	13	12	3	...	4	45	100	4	25	224	799
From Bhurta to Shahpoor,	5,280	100	50	44	53	28	8	17	73	156	3	6	255	391
	5,600	100	52	29	15	4	3	13	132	184	4	14	207	471
37·09 Acres total, ...	16,160	100	132	86	80	35	11	34	250	440	11	45	686	1,661
Per acre,... ...			3·55	2·31	2·16	·94	·29	·91	6·74	11·86	·29	1·21	18·49	44·78

E. WOOD, *Captain*,

Conservator of Oudh Forests.

APPENDIX No. VII.

MEASUREMENTS TO ASCERTAIN THE AGE OF TREES.

The specimens selected were slabs, planed and oiled and were taken from trees felled in the North West portions of the 1st or Kheree Division, Oudh Forests. The rings were counted by Mr. Forrest, Sub-Assistant Conservator, in September 1869.

Number of Logs.	Girth Inches.	Long Radius Inches.	Short Radius Inches.	Mean Radius Inches.	0—2"	2"—4"	4"—6"	6"—8"	8"—10"	10"—12"	Average rings or years per inch of Radius.	1st Counting.	2nd Counting.	3rd Counting.	4th Counting.	5th Counting.	Total.	$\frac{1}{5}$.
1	62	12½	8	9½	10	8	13	12	8		5·45	51	57	50	48	53	259	51⅘
2	63	11½	8	10	12	11	8	11	7		5·00	49	52	49	51	49	250	50
3	62	10½	9	9¾	7	11	13	12	9		5·37	52	56	55	50	49	262	52⅖
4	62	11½	8½	9¾	7	12	10	7	8		4·54	44	48	46	41	43	222	44⅖
5	59¾	12	7	9½	7	13	11	9	8		5·28	48	49	54	50	50	251	50⅕
6	56½	10	7	9	5	7	10	11	9		4·93	42	46	50	45	39	222	44⅘
7	58	13½	5¾	8¼	3	11	10	11	6		5·00	41	38	45	42	40	206	41⅕
8	63½	18¼	4	10	12	12	14	15	9		6·00	62	58	66	60	54	303	60
9	70	13	9½	11	12	16	14	13	12	5	6·47	72	69	70	75	70	356	71⅕
10	61	13¼	6¾	9¾	6	9	12	11	10	*	5·22	48	57	51	49	50	255	51
11	65½	14¾	7¼	10½	9	10	11	13	8	New wood.	4·97	51	55	49	57	49	261	52⅕
12	59	13¾	6¼	9½	10	11	11	9	6		5·26	47	50	54	51	48	250	50
13	57	9¾	8¾	9	7	9	9	8	5		4·44	38	36	40	47	41	202	40⅖
14	61¼	13	7	9¾	8	10	9	8	6		4·42	41	36	48	46	45	216	43⅕
15	61½	12¼	8½	9¾	8	10	11	13	7		4·93	49	47	45	48	52	241	48⅕
16	62½	13¾	8½	10	8	9	12	11	New wood.		4·04	40	43	38	45	36	202	40⅖
17	62	10¾	9	10	6	11	10	9	10		4·78	46	49	52	47	45	239	47⅘
18	65	13	7	10¼	5	13	12	12	10	2	5·34	54	58	52	50	60	274	54⅘
19	66¾	16¼	6¼	10½	7	14	12	10	12	3	5·79	58	66	57	49	61	291	58⅕
20	67½	13¾	6¾	10¾	9	14	13	16	10	3	5·63	65	55	61	63	59	303	60⅗
21	62¼	15½	5¾	10	12	12	10	9	5	...	5·54	48	62	56	51	60	277	55⅘
22	59½	11½	7½	9½	8	10	10	10	5		4·54	43	47	44	40	42	216	43⅕
23	55½	13	5	8¾	6	8	10	7	3		4·25	34	48	40	32	30	184	36⅘
24	60¾	11¼	8½	9¾	8	10	11	11	6		4·06	46	39	40	35	38	198	39⅗
25	64	12	8¾	10¼	8	7	9	12	7		4·38	43	40	45	48	46	222	44⅘
26	67¼	13¼	8	10¾	8	13	11	11	8	3	4·94	54	50	58	50	54	266	53⅕
27	60	13	6½	9½	8	10	8	5	New wood.		3·22	31	35	30	28	29	153	30⅗
28	62½	13½	6½	10	5	8	10	12	7		4·16	42	46	40	42	38	208	41⅗
29	59¼	12	7¼	9½	7	8	8	8	3		3·53	34	36	35	29	34	168	33⅗
30	61¾	13	6½	9¾	6	7	7	8	4		3·24	32	32	35	33	26	158	31⅗
31	69½	17½	5½	11	7	8	10	8	7	New wood.	4·18	40	38	53	49	50	230	46
32	59½	12	7¼	9½	8	9	11	7	4		4·42	39	41	44	40	46	210	42
33	61¼	12	8	9¾	7	8	12	10	7		4·28	44	36	42	39	48	209	41⅘
34	68½	12	9¼	11	7	9	11	10	10	4	4·52	51	50	54	48	46	249	49⅘
35	61¾	13	7½	9¾	9	12	11	9	5		5·12	46	52	49	47	56	250	50
36	59¾	12	7½	9½	7	9	11	10	3		4·52	40	45	47	38	45	215	43
37	58	11	7¼	9¼	8	9	10	10	5		4·80	42	47	39	49	45	222	44⅖
38	62¾	12	8¾	10	10	11	11	10	9		5·22	51	50	54	51	55	261	52⅕
39	64	11	9¼	10¼	10	11	13	11	10	1	5·44	56	54	58	56	53	277	55⅖
40	64	12	9¼	10¼	11	13	12	11	8	New wood.	5·26	55	58	54	50	53	270	54
41	65¾	14¾	7	10½	9	10	10	10	11	2	4·95	52	59	53	52	44	260	52
42	60½	10½	9	9½	6	9	10	9	6		3·83	40	34	38	36	34	182	36⅖
43	53¼	10½	6½	8½	8	9	6	6	2		4·14	31	39	35	34	37	176	35⅕
44	60¼	14	6¼	9½	10	9	9	8	4		5·03	40	54	49	47	49	239	47⅘
45	69½	13	8½	11	12	13	12	13	11	4	5·54	65	59	57	64	60	305	61
46	64	12	8¾	10¼	8	12	11	11	6	New wood.	4·74	48	54	43	53	45	243	48⅗
47	69	15	8	11	8	11	10	11	6	Do.,	4·54	46	58	49	53	44	250	50
48	63¾	11½	9	10¼	9	12	10	11	11		5·01	53	56	48	51	49	257	51⅖
49	60¾	12¼	8	9¾	6	11	11	12	8		4·75	48	46	45	48	45	232	46⅘
50	67¼	13¾	7¾	10¾	8	12	11	11	4	New wood.	4·68	46	52	51	54	49	252	50⅖

50/ 239·64 /4·79 or say 5 rings or years per inch of Radius.

* Where new wood is written the wood was spongy and it was impossible to count the rings.

LUCKNOW:
The 29th September 1869.

E. WOOD, CAPTAIN,
Conservator, Oudh Forests.

APPENDIX No. VIII.

Sales of Forest Produce for Forest year 1869-70.

Sections.	Kheree Division.					Baraich Division.					Gondah Division.					Grand total.
	II.	V.	VI.	VII.	Total.	II.	V.	VI.	VII.	Total.	II.	V.	VI.	VII.	Total.	
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Section 1, ...	110 0 0	1,000 0 0	50 0 0	200 0 0	1,360 0 0	500 0 0	3,525 0 0	500 0 0	200 0 0	4,725 0 0	1,000 0 0	*514 4 0	500 0 0 *360 12 0	100 0 0	2,475 0 0	8,560 0 0
„ 2, ...	1,880 0 0	450 0 0	310 0 0	100 0 0	2,740 0 0	1,500 0 0	5,600 0 0	800 0 0	125 0 0	8,025 0 0	1,000 0 0	*514 4 0	500 0 0 *360 12 0	100 0 0	2,475 0 0	13,240 0 0
„ 3, ...	2,800 0 0	750 0 0	50 0 0	...	3,600 0 0	1,700 0 0	7,800 0 0	600 0 0	40 0 0	10,140 0 0	1,000 0 0	*514 4 0	500 0 0 *360 12 0	30 0 0	2,405 0 0	16,145 0 0
„ 4, ...	120 0 0	2,375 0 0	50 0 0	...	2,545 0 0	600 0 0	600 0 0	100 0 0	325 0 0	1,625 0 0	1,000 0 0	514 4 0	500 0 0 *360 12 0	...	2,375 0 0	6,545 0 0
„ 5, ...	2,200 0 0	300 0 0	50 0 0	...	2,550 0 0	500 0 0	1,200 0 0	50 0 0	...	1,750 0 0	...	...	...	...	...	4,300 0 0
„ 6, ...	1,500 0 0	225 0 0	50 0 0	...	1,775 0 0	1,650 0 0	1,600 0 0	275 0 0	...	3,525 0 0	...	...	...	...	...	5,300 0 0
„ 7, ...	4,000 0 0	500 0 0	50 0 0	...	4,550 0 0	1,650 0 0	1,200 0 0	200 0 0	...	3,050 0 0	...	...	...	...	...	7,600 0 0
„ 8, ...	7,000 0 0	1,000 0 0	200 0 0	...	8,200 0 0	4,800 0 0	† ..	100 0 0	...	4,900 0 0	...	...	...	...	...	13,100 0 0
Total, ...	19,610 0 0	6,600 0 0	810 0 0	300 0 0	27,320 0 0	12,900 0 0	21,525 0 0	2,625 0 0	690 0 0	37,740 0 0	4,000 0 0	2,057 0 0	3,443 0 0	230 0 0	9,730 0 0	74,790 0 0

	II.	V.	VI.	VII.	Total.
	Rs. A. P.	Rs. A. P	Rs. A. P.	Rs. A. P.	Rs. A. P.
Kheree division,	19,610 0 0	6,600 0 0	810 0 0	300 0 0	27,320 0 0
Baraich „ ...	12,900 0 0	21,525 0 0	2,625 0 0	690 0 0	37,740 0 0
Gondah „ ...	4,000 0 0	2,057 0 0	3,443 0 0	230 0 0	9,730 0 0
Grand total,...	36,510 0 0	30,182 0 0	6,878 0 0	1,220 0 0	74,790 0 0

* These figures refer to the lease of the Toolseepoor forest to the Maharajah of Bulrampoor, which for convenience sake has been credited to 4th Section of the Toolseepoor forest in Gondah, though,

† One Section of the Toolseepoor forest is Section 8 of the Baraich Division.

E. WOOD, CAPTAIN,

Conservator, Oudh Forests.

APPENDIX IX.

OUDH FOREST DEPARTMENT.

Annual summary of revenue and expenditure in the different divisions during 1869-70.

Classification.	Direction.	Kheree.	Baraich.	Gondah.	Total.
RECEIPTS.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
I.—Sale of timber at depôts,	...	24,219 11 4	...	..	24,219 11 4
II.—Sale of timber removed by purchasers, ...	...	20,041 0 0	12,624 9 3	5,113 15 7	37,779 8 10
III.—Duty on foreign timber,	...	...	...	..	..
IV.—Permit fees, ...	...	790 0 0	5,790 0 0	4,752 14 1	11,332 14 1
V.—Grazing dues, ...	...	5,200 0 0	14,874 5 0	2,057 0 0	22,131 5 0
VI.—Sale of fruits &c., ...	...	1,251 8 0	3,090 14 0	2,443 0 0	6,785 6 0
VII.—Sale of confiscated timber,	...	201 0 0	966 12 6	414 14 0	1,582 10 6
VIII.—Fines and forfeitures, ...	...	428 10 5	142 2 8	77 8 0	648 5 1
IX.—Miscellaneous, ...	..	2,337 0 6	5 0 0	..	2,342 0 6
Total Receipts, ...	...	54,468 14 3	37,493 11 5	14,859 3 8	1,06,821 13 4
CONSERVANCY AND WORKING.					
I.—Timber expenses, ...	...	35,331 13 0	...	..	35,331 13 0
II.—Purchases of stock and cattle, ...	...	2,403 13 0	98 12 0	66 12 10	2,569 5 10
III.—Feed and keep of cattle,	719 4 4	1,530 1 3	654 7 4	452 11 9	3,356 8 8
IV.—Rent of leased Forests, ...	...	...	...	..	..
V.—Charges in collecting Revenue on grass &c., ...	...	273 9 8	22 0 9	..	295 10 5
VI.—Plantations, ...	...	1,414 15 3	0 8 0	..	1,415 7 3
VII.—Forest work, ...	...	6,318 10 3	2,118 6 1	85 9 1	8,522 9 5
VIII.—Forest survey.	...	233 9 8	..	1 4 0	234 13 8
IX.—Experiments on timber, ...	...	46 4 0	..	..	46 4 0
X.—Communications and buildings, ...	...	10,100 0 9	515 4 4	792 7 3	11,407 12 4
Total Conservancy & Working,	719 4 4	57,652 12 10	3,409 6 6	1,398 12 11	63,180 4 7
ESTABLISHMENTS.					
I.—Salaries, ...	9,886 14 11	12,995 12 8	6,863 0 0	3,687 15 5	33,430 11 0
II.—Allowances, ...	1,834 6 3	2,397 0 9	1,083 4 5	627 13 10	5,942 9 3
III.—Contingencies, ...	698 12 3	1,148 4 4	446 1 6	318 1 1	2,611 3 2
Total Establishments, ...	12,420 1 5	16,541 1 9	8,392 5 11	4,633 14 4	41,987 7 5
Grand Total Expenditure, ...	13,139 5 9	74,193 14 7	11,801 12 5	6,032 11 3	1,05,167 12 0

APPENDIX No. IX.

OUDH FOREST DEPARTMENT.

Dr. Annual Abstract Accounts of the cash transactions of the Forest Department in the year 1869-70. Cr.

Year.	Heads of Account.	Rupees.	Year.	Heads of Account.	Rupees.
1869-70	To Cash balance in hand on 1st April 1869, ...	13,979 6 2	1869-70	By Expendlture of the Department, ...	1,05,167 12 0
	„ Revenue received, ...	1,06,821 13 4		„ Remittances to State Treasuries, ...	95,330 7 5
	„ Remittances from State Treasuries, ...	237 7 4		„ Book transfers, ...	11,425 11 0
	„ Advances recovered, ...	1,151 5 6		„ Refund of Revenue, ...	525 0 0
					2,12,448 14 5
				Cash balance in hand on 31st March 1870, ...	19,741 1 11
	Total, ...	2,32,190 0 4		Total, ...	2,32,190 0 4

Examined and found correct,
(Sd.) SAMUEL JENNINGS,
Asst. Accountant General N. W. P.

E. WOOD, CAPTAIN.
Conservator Oudh Forests.

APPENDIX IX.

OUDH FORREST DEPARTMENT.

Annual statement of outstandings and liabilities of the department on account of contractors and disbursers, 1869-70.

Division.	Department debtor.			Department creditor.			Balances due.	
	At commencement of year.	Recoveries in cash and value of supplies and work done during year.	At close of year.	At commencement of year.	Payment made during year.	At close of year.	To department (outstanding.)	By Department liabilities.
Outstanding on account of sales.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Mohesh Chunder, timber merchant, ...	...	...	...	...	...	2,400 0 0	2,400 0 0	...
Excess payments to contractors.								
Kheree division, old account, ...	...	145 7 8	145 7 8	20,655 14 1	...	20,655 14 1	20,510 6 10	...
New account of carters,	...	13,612 6 4	13,612 6 4	1,155 5 11	19,609 14 4	20,765 4 3	7,152 13 11	...
Do. of rafters,	...	5,343 9 0	5,343 9 0	...	10,129 11 6	10,129 11 6	4,786 2 6	...
							34,849 7 3	
STOCK.								
Shahjehanpoor depôt logs, 304,	@ 40 cub. ft.	@ 1 0 0	per cub. foot.	...	...	14,560 0 0	...	...
Cawnpoor depôt logs 250,	ditto.	„ 1 8 0	ditto.	...	...	15,000 0 0	...	...
Khujooria depôt logs 13,	ditto.	„ 0 10 0	ditto.	...	...	325 0 0	...	...
In Sardah in transit 526,	ditto.	„ 0 12 0	ditto.	...	...	15,780 0 0	...	...
Sohelee depôt logs 2,865,	ditto.	„ 0 10 0	ditto.	...	...	71,625 0 0	...	...
In Sohelee in transit 152,	ditto.	„ 0 12 0	ditto.	...	...	4,560 0 0	...	...
Byramghat depot 561,	ditto.	„ 1 0 0	ditto.	...	...	22,440 0 0	...	...
Sardah sleepers 462,	ditto.	„ 2 8 0	each.	...	...	1,155 0 0	...	...
Cawnpoor „ 241,	ditto.	„ 4 0 0	ditto.	...	...	964 0 0	...	...
Kunhout „ 22	ditto.	„ 3 0 0	ditto.	...	...	66 0 0	1,46,475 0 0	...
LIABILITIES.								
Executive Engineer, Nowgong, ...	28,948 6 3	5,400 0 0	23,548 6 3	...	...	...	...	...
Deputy Commissioner, Kheree 54 logs at Rs. 15 each, account,	810 0 0	135 0 0	675 0 0	...	...	...	...	...
			24,223 6 3	...	...	...	1,81,324 7 3	24,223 6 3

APPENDIX No. IX.

FOREST DEPARTMENT, OUDH.

Annual Timber Account for 1869-70.

Particulars.	Pieces.	Total.
	Sal logs.	
I.—Stock in hand at the following Depôts at the commencement of the year.		
Shahjehanpoor Depôts, Kooria depôt, ...	189	
Shahjehanpoor Depôts, In transit to Cawnpoor, ...	283	
Shahjehanpoor Depôts, Cawnpoor, ...	322	794
Sardah, „ ... Khujooria ghat, ...	13	
Sardah, „ ... Diggia „ ...	19	
Sardah, „ ... Mirroucha „ ...	1152	1184
Sohelee „ ... Belghat, ...	4	
Sohelee „ ... Suthiana depôt, ...	5	
Sohelee „ ... Doodooa „ ...	29	38
		2016
II.—Timber received at depôts from the forests, ...		3193
		5209
	Sal Sleepers.	
I.—Stock in hand :		
Cawnpoor depôt, ...	241	
Roodpoor village, ...	6	
Pipuria „ ...	4	
Sheerpoor „ ...	12	
Diggia ghat, ...	462	725
II.—Timber received at depôts, ...	...	...
		725
Total pieces, ...	Sal logs,	5209
	Sal sleepers,	725

Particulars.	Pieces.	Total.
	Sal logs.	
I.—Timber removed by purchasers from depôts, ...	108+66	297+174=471
II.—Timber lost, ...	6	6+1=7
III.—Stock in hand at the close of the year at the following depôts:—		
Shahjehanpoor Depôts, In Ramgunga, ...	54	
Shahjehanpoor Depôts, „ Gurra, ...	70½	
Shahjehanpoor Depôts, „ Villages, ...	33	
Shahjehanpoor Depôts, „ Transit, ...	206½	
Shahjehanpoor Depôts, At Cawnpoor, ...	250	614
Sardah „ Khujooria, ...	13	
Sardah „ In transit to Byramghat ...	526	539
Sohelee „ Suthiana depôt, ...	2,001	
Sohelee „ Doodooa „ ...	823	
Sohelee „ Bundee, ...	41	
Sohelee „ In transit, ...	152	
Sohelee „ Byramghat, ...	561	3,578
		5,209
	Sal Sleepers.	
I.—Timber removed by purchasers		
II.—Stock in hand,		
Cawnpoor depôt, ...	241	
Roodpoor village, ...	6	
Pipuria „ ...	4	
Sheerpoor „ ...	12	
Diggiaghat depôt, ...	462	725
		725
Total pieces, ...	Sal logs,	5,209
	Sal sleepers,	725

E. WOOD, CAPTAIN,

Conservator, Oudh Forests.

APPENDIX No. IX.

Statement showing the amount realized on account of the different classes of timber sold during 1869-70.

Divisions.	No. of Logs sold.	Cubical contents.	Amount realised and due on account of timber sold.	Average amount per log.	Average cubical contents of logs.	Average amount per 100 cubic feet.	Remarks.
KHEREE.			Rs. A. P.	Rs. A. P		Rs. A. P.	Pieces.
Ex. Engineer 2nd Oudh road division, ...	150	5,882′ 6″ 0‴	5,882 8 0	39 3 5	39′	100 0 0	Timber sold in previous years remaining unremoved at the commencement of the year, ... 278
Mohesh Chundur, ...	116	4,379′ 3″ 6‴	*2,900 0 0	19 5 4	37′ 75	62 8 0	Timber sold during the year, ... 478
Superintendent Jail Shahjehanpoor, ...	20½	1,260′ 1″ 11‴	1,732 1 6	84 7 10	61′	137 8 0	Total, ... 756
Deputy Commissioner Hurdui, ...	1½	...	43 11 0	29 2 0	...	...	Timber remaining unremoved at the close of the year, ... 136
Collector Budaon, ...	12	410′ 2″ 10‴	450 0 0	37 8 0	34′	100 0 0	Balance removed from depots by purchasers during the year, ... 620
Ex. Engineer Bareilly, ...	7	206′ 0″ 6‴	199 12 10	28 8 8	39′	110 0 0	
Futtehghur Gun. C. Agency, ...	...	...	0 0 1	...	...	...	
			11,208 1 5				
Deduct amount due but not realized during the year, ...			*2,400 0 0				
Balance, ...			8,808 1 5				
Add amount realized on account of former year,			403 8 0	Executive Engineer Allyghur,			
			10,246 9 11	„ „ Bareilly,			
			4,761 8 0	„ „ Fyzabad,			
Total shown as revenue on account of timber sales.			24,219 11 4				

APPENDIX IX.

OUDH FOREST DEPARTMENT.

Annual Account of Forest Revenue for the year 1869-70.

	Rs.	As.	P.
Receipts, ...	1,06,821	13	4
Expenditure, ...	1,05,167	12	0
Surplus, ...	1,654	1	4
(Add) difference between Assets and Liabilities at the commencement and close of the year, ...	43,553	13	0
Net Revenue.	45,207	14	4

NOTE.—Besides the above sums which show the actual transactions on Timber brought into the Depot, the value of Timber in various states in the Forest and in transit may be approximately estimated at Rupees 50,000 say 5,000 logs at 10 each.

Detail of difference between Assets and Liabilities at the commencement and close of the year.

	At the commencement of the year.	At the close of the year.	Difference. In favor of the year.	Difference. Against the year.
Value of Timber and other stock, ...	76,324 6 1	1,46,475 0 0	70,150 9 11	...
Out-standing on account of sales and excess payments to Contractors, ...	37,222 13 11	34,849 7 3	...	2,373 6 8
Total Assets, ...	1,13,547 4 0	1,81,324 7 3	70,150 9 11	2,373 6 8
Deduct Liabilities, ...	...	24,223 6 3	...	24,223 6 3
Balance, ...	1,13,547 4 0	1,57,101 1 0	43,553 13 0	...

APPENDIX X.

PROPOSED PLAN OF TIMBER OPERATION, 1870-71 AND 1871-72.

As the plan of timber operations proposed by Dr. Brandis, and myself and sanctioned by the Chief Commissioner have been in operation for the time allowed viz., for two years, it is necessary to frame a new plan. As the budget for the present year has been passed and under the present financial pressure it might not be deemed advisable to alter the budget, particularly as the plan I am about to propose will entail considerable outlay at first without a corresponding increase in the revenue for the year, I therefore recommend that the two years plan of operations be continued during the present financial year, but as the plan of future working is of considerable importance and will tend to the future welfare of the forests, I put on record the outline of the plan which I propose should be forwarded to the Inspector General of Forests for his advice and consideration.

My plan is as follows:—

1. In order to keep on the safe side, only the present number of first class trees should be felled annually viz., 2,900 till more data have been obtained by actual counting of the annual growth of sál trees.

2. To commence miscellaneous timber operations from the second Soholee line, the same where felling operations started from in the cold weather of 1868-69, and work steadily in the same direction as the felling is proceeding.

3. To cut up and stack for fuel every piece of dead wood not suitable for timber in pymanas of so many hundred cubical feet each the wood not to be over 3 feet in length or 7" greatest diameter.

4. To saw up every piece of dead wood of the reserved kinds suitable for timber to the largest possible scantling. Nothing to be taken unless sawn on 4 sides (a limit should be placed, thus nothing under 4' long and 2' × 2' should be taken or planking under 1¼ inch in thickness.) A list of desirable scantlings and planking should be drawn out.

5. Payments to be made to the same contractor for sawing and fagotting scantlings at so much per cubic foot say 1 anna 8 pie per cubic foot and payment to be made for the quantity brought to depôt not the quantity sawn in the forests and fagotting say 4 Rs. per 100 maunds in the stack.

* Rates vary from Rs. 2-8-0 (Powell Shajehanpoor) to Rs. 5 Oudh and Rohilkund Railway.

6. The sawn timber to be taken out of the forests immediately it is sawn, the fuel to be stacked when it will be measured and paid for and the grass cut all round the stack to a distance of 10 feet. Stacks not to contain less than 1,000 maunds.

7. To cut out all unreserved trees over 1½" diameter to be used for fuel.

8. To thin out 2nd and 3rd class reserved trees when they damage each other by close proximity, leaving the one that promises to give the best log thereafter.

9. To cut out all crooked reserved trees or ones that are hollow, if it appears that they will not eventually make good logs all these trees should be cut as near the ground as is possible with regard to economical working.

10. All crooked 4th class reserved trees should be cut flush with the ground and the centre be the highest part. Thus a new growth will be obtained from them.

11. Should Captain Stewart of the Government Tannery Cawnpoor want bark, the bark from small branches of Sâl, Arseyna and Amultas should be dried carefully as may be learned in Griggers arboriculture or from Captain Stewart himself. This might be given free of charge to Captain Stewart for the first year.

12. All green reserved wood suitable for timber should be sawn as the dry wood but kept in different stacks. The price of sawing should be about 1 anna 4 pie per cubic foot,* green wood being easier to saw than dry.

* NOTE.—The price of sawing a 5 feet sleeper is 8 annas=1 anna 7 pies ·2 per cubic foot, but the sawing of different sized scantlings is in the sawyer's favour.

13. Carriage of green sawn timber should be about 1 anna per cubic ft. for dry sawn timber 10 pie from the forests to the Soholee depôts. If a large contract was given 2 annas 6 pie or 1 rupee per 6 cubic feet might be given all over for timber of both kinds sawn and delivered at the depôt.

* NOTE.—The rate for sleepers from forest to Sarda=8 annas=1 anna 7 pie ·2 per cubic foot, for ½ way=8 annas 6 pie cubic foot.

14. Green and dry fuel to be stacked together. The price should be the same for both. The payment should be by measurement not by weight.

15. The railway will take wood for their engines as small as three inches diameter but fuel to 2″ diameter should be taken out, if the railway people will not take it others will.

16. Every thing under 2 inches diameter should be made into charcoal in quantities of not less than 250 maunds.

17. If fuel fetches 25 Rs. per 100 maunds at Byram Ghát, and it should fetch this price and the cost of cutting, &c., carriage to Byram Ghát be 20* the 5 per 100 maunds would pay Government well.

* Captain Losack has given a small contract at this rate.

18. Should the fuel operations only pay their own expenses, the forests would be put into better order for nothing, and the Forest Department would obtain a large quantity of sawn timber at the Soholee depôt for 2 annas 6 pie, which would be worth 10 annas 6 pie giving a clear profit of 8 annas on every cubic foot of timber brought out, and which would not otherwise have been available.

19. Boats 50 feet long by 20 feet outside measurement a plan and section of which is herewith given, should be made at the Soholee depôts. They can be made up of all sorts of small pieces as will be seen by the estimate attached.

20. The boats could be disposed of at Byram Ghát, supposing that only 10 annas and 6 pie was charged per cubic foot for the wood and the making and iron work at cost price it would pay the Forest Department, as a 50 feet boat can take 40 logs, these at Rs. 6 each to Byram Ghát, would be Rs. 240 and not half this sum would be expended in boatmen's wages, thus the Oudh Forest Department could do its rafting for less than Rs. 3 whereas it now pays Rs. 6. The railway calculates that it will require about 12 lacs of maunds of fuel annually, supposing the Kheree division of the Oudh forests supplies 4 lacs of maunds annually at Byram Ghát and supposing a boat can take 2 trips in the year and 1,000 maunds of fuel each trip 200 boats would be required to be at work to carry the 4 lacs of maunds of fuel from the Soholee depôts to Byram Ghát. With the railway at Byram Ghát the river traffic will increase and boats be in demand.

21. In the cold weather of 1871-72, these miscellaneous timber operations might be started and Rs. 50,000 expended on them:—

	Rs.
Say preparing and carrying wood, fuel, 2,00,000 maunds @ Rs. 20 per 100 maunds to Byram ghát, ...	40,000
Bringing to Depôt 12,000 cubic feet at 6 cubic feet per rupee, ...	2,000
Cost of building 25 boats at Rs. 250, without wood, ...	6,250
Preparing charcoal, and carriage to Byram ghát, say Rs. 40 per 100 maunds, say 4,000 maunds, ...	1,600
Contingencies, ...	150
	50,000

EXPECTED SALES, &c.

2,00,000 maunds wood, fuel at Rs. 25 per 100, ...	50,000
12,000 cubic feet sawn timber giving 8 annas profit per cubic feet,...	8,000
By value of cost price of Boats, ...	6,250
4,000 maunds charcoal @ 50 per 100, ...	2,000

Saving effected on carriage by 25 boats at 50 logs each 1000 logs at Rs. 3, ...	3,000
Expected sales, ...	69,250
Expenditure, ...	50,000
Expected profit, ...	19,250

22. The sissoo block along side should be cleared only of dead timber which should be utilized as the other reserved woods are proposed to be.

23. Forest watchers to be put on to prevent fires burning the stacked fuel, and they should be kept on till the rains set in, creepers that have come up should be cut down whilst the miscellaneous timber operations are going on.

24. When a block has been thoroughly cleared of sawn timber, and fuel, and the creepers cut, forest watchers should be kept on from 15th January to the 15th July, and should be stationed all round the block, or blocks and should allow no one except the Conservator and his assistants to enter the block or blocks, no grazing should be allowed and every precaution taken to prevent fires entering from without.

E. WOOD, CAPTAIN,

Conservator, Oudh Forests.

No. 458 F, dated 23rd August, 1870.

From—The Government of India, P. W. Dept.,

To—The Chief Commissioner of Oudh.

I am directed to acknowledge your letter No. 987, dated 20th ultimo, forwarding the Progress Report of the Forest Department in Oudh for 1869-70. The early receipt of this Report with your Review is very satisfactory.

2. His Excellency the Governor General in Council has read with interest what is said regarding the proposed transfer to the Forest Department of certain tracts in the Kheree District, south of the Sardah River, which, many years ago, were granted for cultivation, but which, it appears, have not been cultivated. The suggestion for transferring these lands to the Forest Department appears first to have been made in the Report for 1866-67; it was also noticed in para. 5 of the orders on the Report for 1867-68. In the present Report, Captain Wood states that the total area of these grants is 285 square miles. From para. 1 of your Minute it appears that orders have already issued for the transfer of 19,000 acres, and that you are anxious that the whole of this tract shall, if possible, be managed by the Department, as it is better suited for the growth of sâl wood than for ordinary cultivation. If this can be effected, it will, His Excellency in Council is inclined to think, be a very important addition to the Oudh forests.

3. Paragraph 4 of your Review deals with the important question of the prescriptive and customary rights in the forests. His Excellency in Council is satisfied that the improvement of the forests and their reproduction, where fellings have been carried on, cannot be satisfactory as long as the inhabitants of the vicinity are at liberty to cut wood and to graze their cattle. The matter was reviewed in detail in a Report submitted to you in 1868 by the Inspector General of Forests (No. 65, dated 22nd October 1868), and a copy of that communication will now be printed and circulated with this Report for convenient reference. The suggestion made by the Inspector General of Forest was, that the claims and requirements of each village should be enquired into and decided by a Special Commission, consisting of a Revenue Officer and a Forest Officer; but you are not now prepared to recommend this procedure. The views of the Government of India on this subject are expressed in paras. 7 to 15 of the orders on the Report for 1867-68. It is not necessary here to repeat what was then explained. His Excellency in Council merely desires to say that the important work of gradually freeing the Government forests of all customary rights and privileges should not be lost sight of, and that if special legislation is found to be necessary for this purpose, the Government of India will be glad to take into consideration any proposals you may desire to make in this respect. The whole matter of the settlement of Forest rights is set forth in the draft of a Forest Bill and Explanatory Report prepared last year by the Inspector General of Forests. Copies of these documents will now be communicated to you; and I am to add, for your information, that they have not yet been considered by the Government of India.

4. The practical solution of the difficulty will, His Excellency in Council is inclined to think, probably be different in different cases. Under certain circumstances, blocks of forest may be made over to the villages near the forests for pasture and supply of the needful forest produce; in other cases, it may be preferable to permit grazing and felling of the unreserved kinds of wood throughout the forest, save those portions where cuttings have lately been made. The great aim to be kept in view seems to be, *first*, to ascertain what villages have hitherto been in the habit of providing themselves with forest produce and of grazing their cattle in the Government forests without payment; and *second*, how the reasonable requirements of these villages are to be met in a fair and equitable manner.

The Governor General in Council feels assured that, eventually, the necessity of doing something for a more complete protection of the forests will induce the local Authorities to devise means for obviating the difficulties here adverted to, and His Excellency in Council will be glad to consider any definite proposals that may be made to this effect.

5. Paragraphs 11 to 14 of the Report treat of the protection of the forests. It will, in future, be desirable that the Conservator should append to his reports a return of all offences reported, and of all prosecutions and convictions on account of Forest offences.

Regarding the scheme proposed by the Conservator for protecting the forests against fires, adverted to in para. 5 of your Review, it is supposed that you will cause the Inspector General of Forests to be addressed direct.

Paragraphs 27 to 37 of Captain Wood's Report give an account of what has been done to make the Sohelee River and one of its tributaries which pass through the forests of the Kheree Division, practicable for the carriage of timber. His Excellency in Council is glad to observe that the importance of this work has been fully acknowledged by you.

6. The financial results of the year have not been satisfactory. In October last, when the Regular Estimate was framed, the receipts were estimated at Rs. 1,77,150, of which Rs. 1,10,750 was expected to be realized by the sale of timber at depôts. The actuals are now shown to have been—

	Rs
Receipts	1,06,822
Charges	1,05,168
Surplus ..	1,654

By sale of timber at depôts only Rs. 24,220 were realized. The sales effected were insignificant, and it is not clear why a portion of the large stock in hand, the value of which at the end of the year was estimated at Rs. 1,46,475, was not sold. The value of stock at the commencement of the year was Rs. 76,324; so that if allowance is made for a small decrease in the outstandings of Rs. 2,373, and for liabilities amounting to Rs. 24,223, the net revenue would appear to have been Rs. 45,208.

It is not, however, quite clear whether the stock at the close of the year was not valued at too high a figure. The timber at the Sohelee Depôt, 2,865 logs, measuring 40 cubic feet each, are estimated to be worth Rs. 71,625 at the rate of 10 annas per cubic foot, whereas last year the Sohelee Depôt logs were valued at six annas only. True, the Sohelee River has this year been opened out, and the value of the timber in the depôts on its banks has thus been enhanced: but it seems not to be out of place to enjoin great caution in the annual valuation of stock, and to say that the rates should be fixed very low so as to leave a wide margin for losses and contingencies. Among the other items of revenue, a great decrease under IX. (Miscellaneous) has been noted. The figures of 1868-69 were Rs. 11,368, the Regular Estimate was Rs. 10,000, and the actuals have only been Rs. 2,342. In former years, the receipts from the bridge-of-boats were entered under this head, and in his Budget Report for 1870-71, the Conservator said that the bridge would have to be kept up as usual. It should be explained whether there has been no revenue from this source.

7. The aggregate cash surplus since the formation of the Forest Department in Oudh at the close of 1868-69 was Rs. 2,11,254; adding the surplus of last year, we have Rs. 2,12,908 as the result of eight years' and a half Forest Administration in Oudh, but not Rs. 2,56,462, as erroneously stated by the Conservator.. His Excellency in Council thinks this a poor result. It is true the forests are not very extensive, and a portion is much devastated, yet it seems probable that a much larger revenue might be obtained from them. Hitherto, the Conservator's energy has been mainly directed to works of improvement, such as clearing streams, making roads, wells, division lines in the forests, and the like. All this will doubtless greatly facilitate the working of these forests; but it seems time now that Government should derive some increase of revenue from these operations.

8. Felling operations were last year carried on to the full extent permitted by the plan for working these forests; this is satisfactory. The fellings of former years have been kept considerably below the limit fixed. Captain Wood's proposal, recorded in Appendix X. of Report, to limit the annual fellings to the number fixed in 1868, *viz.*, 2,900 mature trees of the reserved kinds,

principally sâl, and to make large thinnings both of the inferior kinds and of sâl, where necessary, seems proper; and it is hoped that his anticipations regarding the sale of these thinnings, as well as of the tops and branches of sâl as charcoal and fuel, will be realized. There seems every reason to expect that the Oudh and Rohilkhund Railway will eventually consume large quantities of wood-fuel.

9. In para. 25 Captain Wood speaks of eventually using traction engines to do the principal part of the carriage of timber and fuel. This is satisfactory. The Oudh forests, being on almost level or only gently undulating ground, are specially adapted for the employment of machinery, the great drawback being here, in common with most Indian forests, that the work is not continuous, but is necessarily interrupted during the rains, when the forests are difficult of access and unhealthy. His Excellency in Council observes that traction engines may be employed outside the forest during the recess, and also as stationary engines to drive saws, &c. It seems most desirable to make a trial, as, if successful, it may eventually make the Forest Department in Oudh to a certain extent independent of cattle labour in the forests. Her Majesty's Secretary of State will be requested to direct Captain Wood, who is now on furlough in England, to make himself acquainted with the latest improvements in traction engines at Home, and to submit a plan and estimate for an engine specially adapted for the carriage of timber in the Oudh forests.

10. Paragraphs 38 to 42 give an account of what has been done in planting. The commencement made in cultivating the bamboo in the forests is satisfactory. Bamboos are valuable, arrive at maturity within a few years, and their transport is easy; they should be cultivated largely in all Forest Districts where the conditions are favourable, and where they are not indigenous.

The Report, with the orders thereon, and the papers noted above, will be circulated, and will be submitted to Her Majesty's Secretary of State for India.

No. 65, dated 22nd October, 1868.

From—DR. D. BRANDIS, *Inspector General of Forests,*

To—Secretary to the Chief Commissioner of Oudh, in the P. W. Dept.

I have the honour to acknowledge your letter of 24th August, No. 1209, giving cover to communications on Forest matters from the Commissioner of Fyzabad, and the Deputy Commissioner of Gonda and Baraitch; and Captain Wood has at your request communicated to me a letter from the Commissioner of Seetapoor, with an enclosure from the Deputy Commissioner of Kheree on the same subject.

2. These documents have been the subject of repeated discussions between Captain Wood and myself; they touch upon several important subjects connected with the management of the forests, and I beg to submit my remarks under the following heads :—

1st.—The requirements of the agricultural population in the forests and in their immediate vicinity, and the arrangements required for supplying these requirements without injury to the forests.

2nd.—Disposal of minor forest produce.

3rd.—The control of the Department, and the relation of the Forest Officers to Civil Officers in the Province.

3. Mr. Glynn states that the Forest requirements of the agricultural population in and near the forests as follows :—

1st.—Fuel for domestic use.

2nd.—Wood for implements of husbandry.

3rd.—Timber for dwellings.

4th.—Thatching grass for dwellings.

5th.— Grazing for their cattle.

To these I suppose may be added—

6th.—Wood for fences and cattle-pens.

7th.—Wood for carts, troughs for cattle, pestle and mortars, furniture, and other domestic purposes.

4. The first question to be decided appears to be whether the inhabitants in the vicinity of the forests are to be allowed to provide themselves with the forest produce they require for agricultural and domestic purposes, under the restrictions and conditions determined by the Forest Rules, or whether it is intended that the Forest Rules be set aside in this matter.

The Chief Commissioner's Memorandum of the 29th February last, as quoted by the Deputy Commissioner, Kheree District, requires that, while measures for the preservation of sâl trees should be effectually carried out, the inhabitants of the adjacent hamlets and villages should be ensured the supply of wood which is necessary, and to which they have been accustomed. No mention is made of the Forest Rule which restricts the privilege to cut wood to villages within 3 miles of the forest boundary line, and limits it to the unreserved kinds of trees.

Again, the Forest Rules prohibit all grazing of cattle within the Government forests. But the Commissioner of the Seetapoor Division, in his letter to the Financial Commissioner, supports the Deputy Commissioner's opinion that grazing should be allowed.

And there are other passages in the correspondence sent to me for report which seem to make it doubtful whether it is intended to maintain the Forest Rules.

5. But, as the question of a modification of the Rules would require a reference to the Government of India, I will not further enter into this matter, but assume in this communication that it is intended to maintain the Forest Rules intact, and at the same time to show every possible consideration to the wants of the people.

6. The peculiar difficulty in Oudh appears to be that the area of forest jungle and grass land at the disposal of Government is comparatively small. In the Central Provinces, for instance, no difficulty was found in dividing at the time of settlement the large mass of waste lands at the disposal of Government into the following great classes :—

1st.—Village forests, or waste lands attached to village areas. These were given to the cultivators in proprietary right, in the same way as the cultivated lands.

2nd.—*Unreserved Forests.* In these the inhabitants must, as a rule, pay for all articles of forest produce; but some articles are granted them at reduced rates, and in some parts of the country without payment.

3rd.—*Reserved or State Forests.* These are in every respect under the exclusive control of the Forest Department.

Under this arrangement, the villagers have, by the grant of complete control in their own village forests, been compensated for the privilege formerly enjoyed by them of obtaining wood, grass and other produce from the whole extent of the forests in their vicinity.

In Oudh there is not, as far as I can understand, forest land enough at the disposal of Government to form an intermediate class like the unreserved forests in the Central Provinces, so that there will only be State forests and waste lands, or jungle attached to villages.

7. When the Oudh forests were demarcated, I understand that considerable areas of grass land and jungle were allotted to most villages in the vicinity on the understanding that these lands should serve for the grazing of their cattle. In many cases this allotment of waste land may perhaps be considered as an equivalent granted to the agricultural population in lieu of the right of grazing taken away from them by the Forest Rules. In addition to the grant of these allotments, Rule VII was introduced, granting to all villages situated within the forests and within 3 miles of the boundary lines, permission to cut-wood of the unreserved kinds for their own *bonâ fide* use for domestic and farming purposes.

Before the Government forests were demarcated, it is believed that, with the exception of the Tharoos and a few other exceptional cases, the villagers in

the vicinity of the forests had to pay for permission to graze their cattle. Nevertheless, though they paid for it, the liberty to send their cattle to any part of the forest was a great advantage to them, and it should be carefully considered whether the allotment of waste lands, in addition to the cultivated areas, has in all cases been a just and fair equivalent of the advantages enjoyed by them before the issue of the Forest Rules.

Under the Rules, they have no right to either thatching grass, or the grazing of cattle.

8. I fully agree with the sentiments expressed in the 2nd para. of your letter under reply, that every consideration should be shown to the wants and convenience of the people, as far as is consistent with the conservancy of the forests, and on that account arrangements should, wherever practicable, be made by the Forest Department to provide the people with thatching grass and grazing for their cattle as far as necessary to satisfy moderate requirements, payment to be made, or not, according to circumstances. But such concession, as far as they are not based on a clear prescriptive right, should be considered as voluntary concession on the part of Government, and should be made under certain rules and conditions, the general principles of which should receive the sanction of the Chief Commissioner, and perhaps also of the Government of India.

9. The removal of thatching grass is not, in my opinion, likely to involve any great risk to the forests; the Forest Officers would every year assign to the people the tracts where grass may be cut, and determine the time when this may be done. It will probably be necessary to close the forests for people collecting thatching grass during the hot season when the risk from jungle fires is greatest.

10. The grazing of cattle is more difficult to deal with. At the outset I must beg to state, that experience in India, as well as in Europe, has shown conclusively that the ingress and grazing of cattle seriously interferes with the regeneration of the forests. It may be correct what Mr. Glynn states, that cattle do not generally feed on the young shoots of the sâl tree, but they break and tread them down, and they browse on the young shoots of other kinds which are either useful in themselves, such as khair, huldoo and asna, or which further the growth of the sâl tree when associated with it. But more important and injurious than this are the jungle fires, which are a necessary consequence of the admission of cattle and herdsmen during the hot season.

11. The injury done to the forests by the grazing of cattle was perhaps not sufficiently recognized when forest conservancy was first established in India, but it is now acknowledged by all Forest Officers of experience.

It is perfectly true what Mr. Glynn states in the 10th para. of his letter, that the sâl tree is very prolific, and that a very large quantity of seedlings spring up annually; but I beg leave to protest against the conclusion drawn by him, that the destruction of three-fourths of the whole would hardly be appreciated.

According to the present state of our knowledge of this subject, the sâl tree requires to grow up in thick masses, and if, in some places, the removal of a portion might not perhaps injure the development of the rest, there are other parts of the forest where seedlings spring up singly between high grass, and where not one can be spared. Moreover, jungle fires, and consequently grazing, must be excluded from all forest tracts in which felled timber is lying.

12. It has been urged that in some forests the best grazing lands which are on the low ground between the forests, are under water during the rains, and that at that season the cattle must graze in the forests.

During the rains I do not apprehend any difficulty in providing a sufficiency of grazing ground for the village cattle in the forests, as at that time there is no risk from fire. But during the hot season, say from 1st March to the 1st June, the forests should, if possible, be absolutely closed against all cattle. Besides this, it will be necessary, in order to secure the healthy reproduction of the forest, from time to time to close certain blocks against cattle throughout the year, where the young growth of trees demands such protection, or where felled timber is lying.

13. The right to cut timber, wood and fuel of the unreserved kinds, which the villages within 3 miles of the forest boundaries possess under the Forest Rules, is less likely to prove injurious to the forests than the grazing of cattle. There is a sufficient quantity of such wood in the forests, and in many cases the growth of the more valuable kinds may be benefitted by its removal. In addition to the unreserved woods, there are the tops and branches of sâl, and there will be saplings of sâl, the produce of thinning operations, the free removal of which might often be permitted to the inhabitants. The difficulty is, that fires cannot be kept out if people are allowed to enter the forest during the hot season.

It would, therefore, be a great advantage if the forests could be closed absolutely during that time of the year. If this does not appear practicable, then at all events those tracts must be closed against all ingress where felling operations have been completed, and timber is either lying, or whence all timber and wood has been removed.

Such portions of the forests should have complete rest and immunity from fires to secure a healthy re-production of the forest. In the same manner, all tracts where sowing and planting is going on should be closed against ingress and interference. To obviate the difficulties that may arise from the exercise of the privileges granted by Rule VII, and to free the State forests from all interference, the rules for demarcating the boundaries of villages in the vicinity of reserved forests, and the rules for the demarcation of special fuel allotments, were framed by the late Chief Commissioner. In many cases, I suppose, outlying portions of the forest may be given up as special forest allotments to villages.

14. But I gather from the documents sent to me for report, and from the account given by Captain Wood of the state of the forests, that a large number of villages will remain whose waste lands are not considered sufficient to provide for their wants, and to whom allotments of land from the Government forests cannot be given without diminishing the area of the State forests more than appears advisable.

15. The whole subject of providing villages in the vicinity of the Oudh forests with the needful forest produce without injury to the forests should, in my opinion, be made the duty of a Special Commission, which might be composed of a Forest Officer, and an Officer of the Commission, or of the Settlement Department. These Officers should devote their whole time to this work until it is completed. They would enquire into the circumstances of each village, and in their decision they would be guided mainly by the following considerations :—

1st.—The actual requirements of the village.

2nd.—The sources whence these requirements have been hitherto obtained, and whether with or without payment.

3rd.—The extent of waste jungle and grass land attached to the village.

4th.—How far can these privileges be admitted as a matter of right.

5th.—Can any part of the forest be spared to form allotments to the villagers as an equivalent of the usufruct of the forests hitherto enjoyed by them.

6th.—The arrangements under which they may be permitted to draw their supplies with the least possible injury to the forests.

The Commission should draw up a register of the villages whose privileges are admitted, and determine the rules under which these privileges should be exercised, fix the number of heads of cattle which each village would be entitled to send into the forests for grazing, the time of the year when forests should be closed, the proportion of the forest area that may be closed absolutely, and determine the number of households in each village entitled under Rule VII to the free supply of wood for domestic and farming purposes.

The mode of procedure to be followed by the Commission should be fixed, as well as the mode of notifying to the villages the decision of the Commission. The time during which an appeal against their decision might be made to the Chief Commissioner should be fixed; after which their report would be confirmed by the Chief Commissioner with such modifications as might appear necessary. Perhaps it would be necessary to insert a provision in the Forest Rules, that the decision of the Commission, when confirmed by the Chief Commissioner, should be final. I may mention that the general question of the settlement of these prescriptive rights of the population in the vicinity of the State forests is under consideration in connexion with a revision of the Government Forest Act, with a view to enter in the revised Act certain clauses giving legal authority to such clauses in the Forest Rules. In these proposals I have assumed that these arrangements will be made with the cultivators direct, and not with the Talookdars. On this point, however, I write subject to correction.

In a general and preliminary way, this enquiry has been made by the Deputy Commissioner of Kheree, the results are given in his Report, and a review of his proposals will serve better to explain the objects of the present suggestions.

16. In the Kheree District, the following villages are reported to be within 3 miles of the boundary line :—

	No. of villages.	Cultivated, including Baghs.	Culturable waste.	Unculturable waste.	Jungle.		Total area.
					Grass.	Sissoo and other woods.	
Khyreeghur Ilaqua.							
1.—Within the forests...	14	2,559	254	1,911	11,641	958	17,323
2.—Within 3 miles to the east ...	30	29,261	8,762	4,240	18,321	3,465	64,049
3.—Within 3 miles to the west ...	13	9,543	17,097	1,940	3,776	3,430	35,786
Total ...	57	41,363	26,113	8,091	33,738	7,853	117,158
In acres ...	57	24,818	15,668	4,855	20,243	4,712	70,296

It is not said what beegahs these are, but from a comparison with an area statement of the Assistant Superintendent, Settlement and Survey, they would appear to be pucka beegahs, one of which is, I understand, about three-fifths of an acre.

17. The 14 villages in the forests mentioned in the first line of this statement are inhabited by Tharoos, and Mr. Glynn demands for them, in addition to the privileges allowed by the Rules,—

1st.—The privilege of grazing their cattle in the forests.

2nd.—The right of taking poles of sâl and other reserved kinds from the forest for fences and building purposes.

These Tharoos are said to have large herds of cattle; the grazing and jungle lands attached to their villages measure 12,600 beegahs (or about 12 square miles) out of a total area of 17,300, but this extent of grazing land is not considered sufficient. It is difficult to estimate how much forest land in addition to this would be required to satisfy them. The aggregate area of the Khyreeghur forests is reported to be 263 square miles, and if it were decided to give them two or three times their present area of grass and forest, this would take away a considerable piece of the forests. A better arrangement would, I suppose, be to regulate their grazing. In the rains they might be allowed to graze their cattle throughout the forest, those localities excepted which, for conservancy purposes, would be closed absolutely. For the remainder of the year

grazing grounds would be assigned to them in the Phantas, but if they desire to fire the grass, they ought to clear a fire-path round the forests to protect them from injury ; and perhaps it would be better to arrange that the grass on Phantas within the forests should only be fired by the Forest Department.

For the cutting of grass, poles and dry sal-wood, certain tracts in the forests might from time to time be allotted to them, and wood of the unreserved kinds they might be allowed to cut without restriction, excepting only in the tracts closed for certain purposes

18. Mr. Glynn states that, with proper treatment, the Tharoos would be a useful agency to the Forest Department. They do not, I believe, engage in timber work, but they might be employed to aid in the protection of the forest, and perhaps also in the work of improvement. This, and the entire management of their grazing and their supplies of wood and other forest produce might, in my opinion, be greatly facilitated by placing these villages in the forests under the control of the Forest Department.

The Assistant in charge of the Khyreeghur forests should, under all circumstances, while not engaged in the forests, reside at the head-quarters of the Deputy Commissioner ; and as far as the revenue work connected with these Tharoos is concerned, he would be in the position of an Assistant to the Deputy Commissioner. Should this arrangement meet with the Chief Commissioner's approval, it might obviate many needless complications and difficulties. At first it might be tried as an experiment for a limited period.

19. I do not in the least agree with the expressions used by the Deputy Commissioner concerning this matter in the 8th para. of his letter. The question is not, as put by him, and endorsed by the Commissioner of the Division, whether the Government will have in these marshy tracts khair plantations, or Tharoos producing rice of the best quality. There is land enough for the cultivation of both khair and paddy, and both should be encouraged

Nor do I agree in Mr. Glynn's opinion that khair is not a valuable wood. It is one of the strongest and most durable woods in India ; but the tree is far more useful still in yielding catechu, a valuable article of commerce, the manufacture of which must come to a stand-still unless the naturally-grown trees are protected, and plantations on a large scale are formed.

20. The second line of the statement entered above shows 30 villages situated within the 3 miles boundary of the forest to the eastward. The grass and forest attached to these cover an area of 21,800 beegahs, or about one-third of the entire area of these villages. The Deputy Commissioner demands grazing in the forest for a portion of these villages only, as many of them have a large proportion of grazing land already. Should the Chief Commissioner agree with this view of the case, then those villages which have not a sufficient area might perhaps be provided with allotments of forest and grazing ground by abandoning to them a piece of the State forests ; or should too large an area be demanded as an equivalant, certain portions of the forest might perhaps annually be assigned for grazing, but during the hot season they should, if possible, be closed. The details of these arrangements will have to be settled by a Special Commission as above proposed.

21. There are also on the east side beyond the 3 miles limit 14 villages in the Khyreegurh Ilaqua ; for these the Deputy Commissioner claims permission to get their sâl or other wood and grass by paying for it at lower rates than outsiders, but he does not think that fuel should be allowed them, as the wood already on the village areas is amply sufficient. The aggregate areas of grass and jungle attached to these villages, to judge by the statement, are very moderate, the totals being—

	Beegahs.
Cultivated	27,078
Culturable waste	8,723
Unculturable „	3,065
Grass	1,274
Jungle	4,716
Total of 14 villages ...	44,856

If all villagers were satisfied with such moderate requirements, amounting to somewhat more than one-seventh of the entire area, then the fuel allotments would probably be found possible in most cases.

22. The last line in the above statement exhibits 13 villages to the west of the forests within 3 miles limit. The grass and jungle attached to these villages amount to 7,206 beegahs, or about one-fifth of the whole area.

The Deputy Commissioner recommends that they be permitted to take the supplies of forest produce from the Khyreegurh forests under the same restrictions as in the case of the villages to the eastward, and they might probably be dealt with in a similar manner.

To the villages in the same direction beyond the 3 miles limit, Mr. Glynn recommends that a strip of forest land be given which bounds them on the northward. This proposal appears to require special enquiry by the Commission proposed to be appointed. In justice to the future interests of the country, it can hardly be decided without further investigation.

23. Regarding the villages to the south of the forests in Pergunnahs Bhoor and Pullea, the Deputy Commissioner says that, with few exceptions, the people have not been allowed to draw their supplies from, or to graze their cattle without payment in, the Khyreegurh Forest.

The people of Bhoor used a tract of forest south of the Sohelee, of which the greater portion was made into grants to attract settlers in 1865-66, and was in 1866-67 attached to the forests.

24. The Deputy Commissioner states that this tract is unhealthy and unfitted for sâl. A large portion, however, is fitted for the growth of khair and sissoo, both most valuable and important trees. He recommends that grazing in this forest tract might be permitted to all villages within 3 miles of it, and that fuel also might be allowed free from this forest. Now, these proposals should, I think, be most carefully sifted. In the first instance, it should be borne in mind that these forests were originally made into grants to attract settlers, and were actually advertised for sale. Had they been sold, the neighbouring villages would have lost all use of these lands for the grazing of cattle, and claims for compensation, or an equivalent in land, would probably not have been admitted.

Since these lands have been included in the State forests, Rule VII gives to the adjoining population the right to cut timber and wood, but they are not entitled to graze their cattle. Sissoo and khair probably suffer much more from cattle than sâl, and it is not impossible that the greater portion of these forest tracts must be closed absolutely if it is intended to effect any improvement of importance.

Thus far Mr. Glynn's review of the requirements of the population in the vicinity of the Khyreegurh forests.

25. In the correspondence submitted to the Financial Commissioner by the Commissioner of Fyzabad, the Deputy Commissioner of Baraich states that the villagers have been restricted in the exercise of the privilege of getting wood of the unreserved kinds for domestic and farming purposes allowed them by Rule VII. This mistake on the part of the Forest Department is greatly to be regretted. The unavoidable effect of such mistakes must be to give rise to erroneous views regarding the aims of forest conservancy, and to increase the obstacles in the way of its introduction. The interests of the forests must suffer by such complaints as that made by the Deputy Commissioner, that the neighbouring population are not permitted to enjoy the privileges which Government had expressly reserved for them in the Oudh Forest Rules.

26. In the 5th para. of his letter, Mr. Anderson remarks that Tharoos, who have always hitherto been exempt from grazing dues, have now within the last month or two been made to pay even for their plough-bullocks. The Forest Rules do not give them the right of grazing in the forest, but I have explained above that permission to graze a moderate number of cattle, should, wherever practicable, be given to the Tharoos under such rules and restrictions as will prevent serious injury to the forests.

27. The same Officer states that the privileges, until lately enjoyed by the villagers, gave them unreserved timber and grass for building and for agricultural purposes, fuel and grazing for their plough-bullocks, and that, in addition, the Tharoos and Bungarees had enjoyed free grazing for all their cattle.

It will probably be deemed expedient here, as in the Kheree District, to make a detailed investigation into the privileges of the villages in the vicinity of the forests, and this enquiry will probably result in arrangements being made to meet moderate requirements of the people.

28. The Deputy Commissioner of Gondah states that the Tharoos, being the only people who can stand the climate and cultivate in the forests, were allowed the entire run of the jungle, with the exception of the sâl, but that they are now satisfied with Rule VII of the published Rules, which, in the Deputy Commissioner's opinion, should be maintained without any further restrictions.

29. Before leaving this subject, I would beg to repeat my suggestion, that a Special Commission be appointed to investigate into, and decide upon, the Forest privileges of the people in the vicinity of the State forests in the Kheree, Baraich and Gondah Districts. Some delay may be caused, because it may be considered necessary to give legal force to the decisions of this Commission when confirmed by the Chief Commissioner. And it may not be possible, during the impending working season, to make available the services of the Officers required. Meanwhile, it may be considered whether the Conservator might not, in conjunction with the Deputy Commissioner, draw up a list of the villages entitled to the privileges granted them in the VIIth Rule. This would obviate doubts as to what villages are entitled to these privileges.

30. I now come to the second point—the disposal of minor forest produce in the Oudh forests. By the second clause of the Forest Rules, the administration of the Government forests throughout the Province of Oudh is vested in the Conservator of Forests. I understand this provision to impose upon the Conservator the duty of disposing the produce of these forests to the best advantage of the State, subject to the just demands of the neighbouring population and the conservancy of the forests.

31. Before 1866, I understand that the right of collecting minor forest produce in the different Forest Districts was sold by Deputy Commissioners, either by public auction or by private sale. In Autumn 1866 Mr. Read introduced the direct collection of dues on that account.

This system has given rise to much dissatisfaction and complaint on the part of Deputy Commissioners, and, in my opinion, it does not appear expedient to continue it.

I would suggest the consideration of the following plan which appears to me preferable to direct collections.

32. The minor forest produce may conveniently be divided into the following classes :—

1st.—Timber and wood removed by purchasers (Budget heading II).
2nd.—Grazing of cattle (Budget heading V).
3rd.—Miscellaneous forest produce (Budget heading VI).

1st.—*Timber and wood of the under-mentioned kinds.*—Dead and dry timber of the reserved trees, including all wood for household and farming purposes and charcoal required by the inhabitants, those excepted whose claims to the free use of these articles have been recognized. The revenue from this source will appear under Budget heading II (Timber removed by purchasers). I would suggest that annual contracts for the cutting and removal of these articles be given for the different parts of the forests. They would, for this purpose, be divided into following blocks :—

	Blocks.
I.—Khyreegurh Division	8
II.—Baraich „	8
III.—Gondah „	4

The contracts would run from 1st October to the same date in the following year. All timber, wood or charcoal remaining within the forests after the expiry of the contract, would revert to Government, unless special permission was obtained.

The Contractor should be prohibited from cutting the reserved kinds, and the following more valuable unreserved timbers :—

Koosoom,
Mowah,
Tamun,

and the wood of these kinds would be sold under special agreements, either by the sale of standing trees, or by collecting the timber at depôts. The sale of mowah wood would probably be prohibited altogether.

All dry and dead wood of the reserved kinds might be taken by the Contractor, excepting only the trees felled by the Department, and not yet removed.

Charcoal-burners would be assigned certain localities where to make their kilns, and should hereafter the demand for charcoal increase, the expediency of granting separate contracts for that article may be considered. Hereafter a provision may be entered in these contracts, that the timber and forest produce shall pass out by certain routes, in order to prevent more effectually the unauthorized removal of wood and timber.

33. The contracts would be given to the highest bidder, if an approved person : they would be made at the Deputy Commissioner's Office by the Forest Officer in presence of the Deputy Commissioner, whose approval, to be given or refused on the spot, of the different purchasers, would be requisite. The purchaser would furnish security for the full amount. One-half of the purchase-money should be paid into the Treasury within 15 days from date of sale, the balance before the 15th April of the ensuing year.

It might be considered whether maximum rates should be fixed for the sale by the Contractor of this lease of forest produce.

34. *Grazing of cattle.*—The Commission proposed to be appointed to enquire into the privileges of the population in the vicinity of the forests will determine what villages or persons are entitled to the privilege of free grazing in the State forests.

According to Forest Rule XII, grazing is absolutely prohibited in the Oudh State forests ; yet it appears probable that the claims of some people, such as the Khyreegurh Rajah, and the Tharoos residing in the forests, to free grazing, must, on investigation, be admitted.

These privileges are a necessary evil, and if they cannot be commuted, grazing must be allowed to them under certain rules as suggested above, so as to protect the forests against injury as much as possible.

35. The interests of the forests would certainly best be guarded by enforcing the rule quoted, and prohibiting all grazing in the forests of persons not specially privileged. But it seems clear that this cannot be done without serious injury to the people. Under all circumstances it should, however, be borne in mind that the revenue derived from the grazing of cattle will in no way compensate for the immense injury done to the forests.

Where the admission of cattle of parties whose claim to free grazing has not been recognized appears indispensable for the welfare of the people, their grazing should be allowed under strict rules, and payment should be made for the permission.

Gwallahs and Aheers, who come with their cattle from a distance to graze in the Oudh forests, should not, as a rule, be admitted wherever other gazing grounds, such as Nepal, are open to them ; goats and sheep should also be excluded absolutely ; the injury which they inflict upon the forests is incalculable.

36. For the cattle of the villages in the vicinity of the forests, the following arrangements might be adopted, at first as an experiment only.

The Commission proposed to be appointed should decide what villages should be admitted, and the number of cattle of the different kinds to be allotted to each, and their number would be fixed one for all.

The Deputy Commissioner would annually grant passes to these villagers for the number of cattle allotted to them, and these passes would be checked by

the Forest Department. It may not be found practicable to assign separate blocks to each village, but certain portions of the forest may be allotted to groups of villages.

Payment according to certain rates should be made annually to the Deputy Commissioner, who would credit the amounts to the Forest Depertment, sending details to the Forest Officer in charge of the Division.

37. Certains blocks would be absolutely closed; the selection of the blocks to be closed must be left entirely to the Officers of the Forest Department; it might, however, be arranged that at no time more than one-half of the entire area of one Forest Division should be closed.

Those Phantas which are not included in Tharoo villages should be fired by the Forest Department, in anticipation of the regular jungle fires, due precaution being taken to prevent the fire spreading into the forests and into the young growth of sâl coming up on the edge of the forests.

Though firing the forests is prohibited by the rules, we most expect to see fires where cattle and herdsmen are admitted. It will therefore be necessary to isolate those blocks which are closed against cattle by clearing fire-paths around them. This is on the assumption that it will not be practicable to exclude cattle during the hot season. In the arrangements under which cattle will be allowed to graze in the forests, the right of lopping branches for fodder or litter should not on any account be included. In this point the provision of Forest Rule VI must strictly be maintained.

The introduction of these arrangements will require time, and, meanwhile, the grazing might be let by contract, in the same manner as the right to collect wood of the unreserved kinds, but the Forest Department should at once be permitted to close against cattle up to half the forest area in each Division.

All revenue derived from the grazing of cattle will be credited under Budget heading V.

38. *Miscellaneous articles of Forest produce.*—Contracts for these should be granted in accordance with the principles laid down for the removal of wood. It should be considered whether separate contracts should be given for each of the following groups of articles; as a matter of course, no produce of reserved trees is included in the following, unless specially mentioned :—

1st.—Guns, honey, wax, lac, flowers, mowah excepted, seeds, fruits, bark, leaves, roots for drugs, dyes, tanning and other manufactures. This includes the fruits of the ebony tree, the bark of asna, felled or fallen. Since khair has been made a reserved tree, the manufacture of khatta, or catechu, should not be allowed; as it appears necessary to encourage the reproduction of this tree.

2nd.—Mowah flowers and fruits.—This contract must begin about the end of April, it cannot be given simultaneously with the contract for the other miscellaneous produce.

3rd.—Grass for thatching, ropes, mats and other articles, but not for fodder.

4th.—The right of fishing and shooting, and the collection of horns and hides of game and cattle. The question should be decided whether the horns and hides of domestic cattle dying while in the forest should be sold, or left to the owners of the cattle. The question is quite immaterial for Forest conservancy, but it may be mentioned that the herdsmen do not collect these articles which is done by men of a lower caste. In the forests of some other Provinces the right of collecting horns and hides is sold by the Forest Department.

5th.—The right of collecting minerals, stone and shells for lime, and of burning lime. This last includes the right of collecting fuel; it may be considered whether lime-burners should not be limited to the use of dry wood.

The revenue realized under these different headings will be included under Budget Sub-head VI.

For revenue it might be advantageous to give separate contracts for these different groups of articles: but for the protection of the forests it may be considered preferable to have all contracts in one block of the forests in the hands of one or a few responsible men.

39. Contracts should not be granted for drift and waif timber and wood.

All such wood should be collected at certain depôts, and notices be published from time to time inviting claimants.

Drift timber is, I believe, found in the following rivers:—

1.—Sardah.

2.—Koorialla.

3.—Sohelee.

4.—Gogra.

5.—Raptee.

It should be considered where depôts for the collecting of drift timber should be established. Those drift timber depôts which cannot conveniently be placed in charge of responsible Forest Officers would be placed under the Deputy Commissioner of the District.

It might be considered expedient to add to the Oudh Forest Rules a few clauses to regulate the management of drift and waif timber; these clauses would have to provide for the following matters :—

Marking of drift timbers.

Salvage to be paid for securing it.

Depôts where to be collected.

Periodical notices of drift timber collected at such depôts to be published.

Claims for drift timber where to be preferred, and by whom to be decided.

Timber for which proof of ownership has not, within a certain time, been given how to be disposed.

Chapter IV of the British Burmah Forest Rules might be consulted when framing these additional clauses of the Oudh Rules.

40. The third subject remarked upon in the document sent to me for Report relates to the control over the Department, and the relation of Forest Officers to the Civil Officers of the Province.

The Commissioner of the Fyzabad Division states that there seems to be practically no control over the Forest Department. I would beg to draw attention to the Rules* for the management of Forest business, issued by the Government of India in March 1864, and to submit for the Chief Commissioner's consideration, that there seems to be no reason why the Forest Department should not be as strictly controlled as any other Department in the Province.

* Circular No. 4 of 22nd March 1864.

On matters of a technical and professional character, the Conservator is permitted to correspond with the Inspector General of Forests, but in the present stage of the work, it is as yet impossible to separate matters of that nature from questions of a general character, and consequently the official correspondence between the Conservator and Inspector General of Forests has hitherto been insignificant.

41. It is clear from the papers under report, that there has not of late been that cordial co-operation between Forest Officers and District Officers without which success is impossible. I would suggest for the Chief Commissioner's consideration, that the Assistants in charge of the three Divisions should reside at the head-quarters of the Kheree, Baraich and Gondah Districts, respectively, and should keep the Deputy Commissioners of these Districts regularly informed of all occurrences that may in any way concern the rights and privileges of the inhabitants. They should also submit to the Deputy Commissioner a list of all Subordinate Forests Officers in his District, and keep him acquainted with all changes and promotions made in the establishments under their orders.

42. The Conservator should seize every opportunity of explaining the nature of his work, and all new measures of importance, to the Financial Commissioner, and to the Commissioners of Divisions; and before submitting to the Chief Commissioner any new proposals connected with the rights and privileges of the people, he should first endeavour to obtain the assent thereto of the Commissioners of Divisions.

43. The main difficulty relates to the rights and privileges of the agricultural population in the vicinity of the forests. When this shall have been arranged by the investigation into these rights and privileges in the manner suggested by me in this Report, and when the farming out of minor forest produce shall have been placed upon a satisfactory footing, then it may be hoped that the main cause of the late misunderstandings will have been removed.

44. I would suggest for the Chief Commissioner's consideration, that before any orders are passed on the proposals of this Report, the Conservator be directed to discuss them with the Deputy Commissioners of the Districts in which the forests are situated, and to submit for the Chief Commissioner's orders, joint Reports on these proposals by himself and each Deputy Commissioner.